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<213> Mus musculus

<400> 114

Ser Ala Ser Ser Val Ser Ser Ser His Leu Tyr

- 10

1 5

<210> 115

<211> 7

<212> PRT

<213> Mus musculus

<400> 115

Ser Thr Ser Asn Leu Ala Ser

1

5

<210> 116

<211> 9

<212> PRT

<213> Mus musculus

<400> 116

His Gln Trp Ser Ser Tyr Pro Trp Thr

1 5

<210> 117

<211> 354

<212> DNA

<213> Mus musculus

<400> 117

caggiticage tigeageagte tiggacetiga etiggigaage etiggigaage etiggigaage ageageage 60

teetigeaagi etietiggeta tigeatteaet aacteetiga tigaactiggit gaageagagi 120

cetiggaaagi giettigagti gattiggaegi attiateeti gagaatigaaga aactatetae 180

aatiggaaat teaggiteaa gieeaacaeti aetigeagaea aateetieea eacageetiae 240

atiggatatea geageetigae atetigaggae tetigegitet aetitetigtige aagaageetat 300

gatgattaet egittigetta etiggigeeaa giiggaetetigi teaetigtete tigea 354

<210> 118

⟨211⟩ 118

<212> PRT

<213> Mus musculus

<400> 118

Gin Vai Gin Leu Gin Gin Ser Gly Pro Glu Leu Val Lys Pro Gly Ala 1 5 10 15 Ser Val Lys IIe Ser Cys Lys Ala Ser Gly Tyr Ala Phe Thr Asn Ser 20 25 30

Trp Met Asn Trp Val Lys Gln Arg Pro Gly Lys Gly Leu Glu Trp Ile 35 40 45

Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr lie Tyr Asn Gly Lys Phe 50 55 60

Arg Val Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr 65 70 75 80

Met Asp lie Ser Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Phe Cys 85 90 95

Ala Arg Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ala 115

⟨210⟩ 119

<211> 336

<212> DNA

<213> Mus musculus

<400> 119

atctcctgta	ggtctagtaa	gagtctcctg	catagtaatg	gcaacactta	cttgtattgg	120
ttcctgcaga	ggccaggcca	gtctcctcaa	ctcctgatat	atcggatgtc	caaccttgcc	180 .
tcaggagtcc	cagataggtt	cagtggcagt	gggtcaggaa	ctgctttcac	actgagaatc	240
agtagagtgg	aggctgagga	tgtgggtgtt	tattactgta	tgcaacatat	agaatatcct	300
tttacgttcg	gatcggggac	caagctggaa	ataaaa			336

<210> 120

<211> 112

<212> PRT

<213> Mus musculus

<400> 120

Asp lie Val Met Thr Gin Ala Ala Pro Ser lie Pro Val Thr Pro Gly
1 5 10 15

Glu Ser Val Ser lie Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser 35 40 45

Pro Gin Leu Leu IIe Tyr Arg Met Ser Asn Leu Ala Ser Gly Vai Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg Ile

65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95

lle Giu Tyr Pro Phe Thr Phe Giy Ser Gly Thr Lys Leu Glu lle Lys
100 105 110

<210> 121

<211> 762

<212> DNA

<213> Mus musculus

<400> 121

atggaatggc ctttgatctt tctcttcctc ctgtcaggaa ctgcaggtgt ccactcccag 120 gttcagctgc agcagtctgg acctgagctg gtgaagcctg gggcctcagt gaagatttcc tgcaaggett etggetatge atteactaae teetggatga aetgggtgaa geagaggeet 180 240 ggaaagggtc ttgagtggat tggacggatt tatcctggag atggagaaac tatctacaat 300 gggaaattca gggtcaaggc cacactgact gcagacaaat cctccagcac agcctacatg gatatcagca gcctgacatc tgaggactct gcggtctact tctgtgcaag aggctatgat 360 gattactcgt ttgcttactg gggccaaggg actctggtca ctgtctctgc aggtggtggt 420 480 ggttcggata ttgtgatgac tcaggctgca ccctctatac ctgtcactcc tggagagtca 540 gtatccatct cctgtaggtc tagtaagagt ctcctgcata gtaatggcaa cacttacttg tattggttcc tgcagaggcc aggccagtct cctcaactcc tgatatatcg gatgtccaac 600 cttgcctcag gagtcccaga taggttcagt ggcagtgggt caggaactgc tttcacactg 660
agaatcagta gagtggaggc tgaggatgtg ggtgtttatt actgtatgca acatatagaa 720
tatcctttta cgttcggatc ggggaccaag ctggaaataa aa 762

<210> 122

<211> 254

<212> PRT

<213> Mus musculus

<400> 122

Met Glu Trp Pro Leu IIe Phe Leu Phe Leu Leu Ser Gly Thr Ala Gly

1 5 10 15

Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys
20 25 30

Pro Gly Ala Ser Val Lys IIe Ser Cys Lys Ala Ser Gly Tyr Ala Phe 35 40 45

Thr Asn Ser Trp Met Asn Trp Val Lys Gln Arg Pro Gly Lys Gly Leu 50 55 60

Glu Trp lie Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr lie Tyr Asn 65 70 75 80

Gly Lys Phe Arg Val Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser

85 90 95

Thr Ala Tyr Met Asp lle Ser Ser Leu Thr Ser Glu Asp Ser Ala Val 100 105 110

Tyr Phe Cys Ala Arg Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly
115 120 125

Gin Gly Thr Leu Val Thr Val Ser Ala Gly Gly Gly Gly Ser Asp lle 130 135 140

Val Met Thr Gin Ala Ala Pro Ser lie Pro Val Thr Pro Gly Giu Ser 145 150 155 160

Val Ser IIe Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser Asn Gly

165 170 175

Asn Thr Tyr Leu Tyr Trp Phe Leu Gin Arg Pro Gly Gin Ser Pro Gin 180 185 190

Leu Leu lie Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro Asp Arg 195 200 205

Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg 11e Ser Arg 210 215 220

Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His Ile Glu

225 230 235 240

Tyr Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu IIe Lys
245
250

<210> 123

<211> 635

<212> PRT

<213> Homo sapiens

<400> 123

Met Pro Ser Trp Ala Leu Phe Met Val Thr Ser Cys Leu Leu Leu Ala 1 5 10 15

Pro Gin Asn Leu Ala Gin Val Ser Ser Gin Asp Val Ser Leu Leu Ala 20 25 30

Ser Asp Ser Glu Pro Leu Lys Cys Phe Ser Arg Thr Phe Glu Asp Leu 35 40 45

Thr Cys Phe Trp Asp Glu Glu Glu Ala Ala Pro Ser Gly Thr Tyr Gln
50 55 60

Leu Leu Tyr Ala Tyr Pro Arg Glu Lys Pro Arg Ala Cys Pro Leu Ser 70 75 80

Ser Gln Ser Met Pro His Phe Gly Thr Arg Tyr Val Cys Gln Phe Pro 85 90 95 Asp Gin Giu Giu Val Arg Leu Phe Phe Pro Leu His Leu Trp Val Lys
100 105 110

Asn Val Phe Leu Asn Gin Thr Arg Thr Gin Arg Val Leu Phe Val Asp 115 120 125

Ser Val Gly Leu Pro Ala Pro Pro Ser lle lle Lys Ala Met Gly Gly 130 135 140

Ser Gin Pro Gly Glu Leu Gin Ile Ser Trp Glu Glu Pro Ala Pro Glu
145 150 155 160

lle Ser Asp Phe Leu Arg Tyr Glu Leu Arg Tyr Gly Pro Arg Asp Pro 165 170 175

Lys Asn Ser Thr Gly Pro Thr Val IIe Gln Leu IIe Ala Thr Glu Thr 180 185 190

Cys Cys Pro Ala Leu Gln Arg Pro His Ser Ala Ser Ala Leu Asp Gln 195 200 205

Ser Pro Cys Ala Gin Pro Thr Met Pro Trp Gin Asp Gly Pro Lys Gin 210 215 220

Thr Ser Pro Ser Arg Glu Ala Ser Ala Leu Thr Ala Glu Gly Gly Ser

225 230 235 240

Cys Leu IIe Ser Gly Leu Gln Pro Gly Asn Ser Tyr Trp Leu Gln Leu
245 250 255

Arg Ser Glu Pro Asp Gly IIe Ser Leu Gly Gly Ser Trp Gly Ser Trp
260 265 270

Ser Leu Pro Val Thr Val Asp Leu Pro Gly Asp Ala Val Ala Leu Gly 275 280 285

Leu Gln Cys Phe Thr Leu Asp Leu Lys Asn Val Thr Cys Gln Trp Gln 290 295 300

Gln Gln Asp His Ala Ser Ser Gln Gly Phe Phe Tyr His Ser Arg Ala 305 310 315 320

Arg Cys Cys Pro Arg Asp Arg Tyr Pro IIe Trp Glu Asn Cys Glu Glu
325 330 335

Glu Glu Lys Thr Asn Pro Gly Leu Gln Thr Pro Gln Phe Ser Arg Cys 340 345 350

His Phe Lys Ser Arg Asn Asp Ser IIe IIe His IIe Leu Val Glu Val
355 360 365

Thr Thr Ala Pro Gly Thr Val His Ser Tyr Leu Gly Ser Pro Phe Trp

370 375 380

Ile His Gln Ala Val Arg Leu Pro Thr Pro Asn Leu His Trp Arg Glu 385 390 395 400

lle Ser Ser Gly His Leu Glu Leu Glu Trp Gln His Pro Ser Ser Trp
405 410 415

Ala Ala Gin Giu Thr Cys Tyr Gin Leu Arg Tyr Thr Gly Giu Gly His
420 425 430

Gin Asp Trp Lys Val Leu Giu Pro Pro Leu Gly Ala Arg Gly Gly Thr 435 440 445

Leu Glu Leu Arg Pro Arg Ser Arg Tyr Arg Leu Gln Leu Arg Ala Arg 450 455 460

Leu Asn Gly Pro Thr Tyr Gln Gly Pro Trp Ser Ser Trp Ser Asp Pro 465 470 475 480

Thr Arg Val Glu Thr Ala Thr Glu Thr Ala Trp lle Ser Leu Val Thr 485 490 495

Ala Leu His Leu Val Leu Gly Leu Ser Ala Val Leu Gly Leu Leu Leu 500 505 510

Leu Arg Trp Gln Phe Pro Ala His Tyr Arg Arg Leu Arg His Ala Leu

515 520 525

Trp Pro Ser Leu Pro Asp Leu His Arg Val Leu Gly Gln Tyr Leu Arg 530 535 540

Asp Thr Ala Ala Leu Ser Pro Pro Lys Ala Thr Val Ser Asp Thr Cys 545 550 555 560

Glu Glu Val Glu Pro Ser Leu Leu Glu IIe Leu Pro Lys Ser Ser Glu 565 570 575

Arg Thr Pro Leu Pro Leu Cys Ser Ser Gln Ala Gln Met Asp Tyr Arg 580 585 590

Arg Leu Gin Pro Ser Cys Leu Giy Thr Met Pro Leu Ser Val Cys Pro
595 600 605

Pro Met Ala Glu Ser Gly Ser Cys Cys Thr Thr His IIe Ala Asn His 610 615 620

Ser Tyr Leu Pro Leu Ser Tyr Trp Gln Gln Pro 625 630 635

<210> 124

<211> 122

<212> PRT

<213> Mus musculus

<400> 124

Gin Val Gin Leu Gin Gin Ser Giy Pro Giu Leu Val Lys Pro Giy Ala 1 5 10 15

Ser Val Lys IIe Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Ser Ser 20 25 30

Trp Met Asn Trp Val Lys Gin Arg Pro Gly Lys Gly Leu Glu Trp lle : 35 40 45

Gly Arg Thr Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Asn Gly Lys Phe 50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr 65 70 75 80

Met Gin Leu Ser Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Phe Cys 85 90 95

Ala Arg Gly Trp lle Leu Ala Asp Gly Gly Tyr Ser Phe Ala Tyr Trp 100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ala 115 120

<210> 125<211> 112

<212> PRT

<213> Mus musculus

<400> 125°

Asp lie Val Met Thr Gin Ala Ala Pro Ser lie Pro Val Thr Pro Gly
1 5 10 15

Glu Ser Val Ser Ile Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser

35 40 45

Pro Gin Leu Leu Ile Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg IIe
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly lle Tyr Tyr Cys Met Gln His 85 90 95

Leu Glu Tyr Pro Phe Thr Phe Gly Thr Gly Thr Lys Leu Glu IIe Lys
100 105 110

⟨210⟩ 126

<211> 118

<212> PRT

<213> Mus musculus

<400> 126

Gin Val Gin Leu Gin Gin Ser Gly Pro Glu Leu Val Lys Pro Gly Ala 1 5 10 15

Ser Val Lys IIe Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Ser Ser 20 25 30

Trp Met Asn Trp Val Lys Gln Arg Pro Gly Lys Gly Leu Glu Trp lie 35 40 45

Gly Arg lie Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Asn Gly Lys Phe 50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr 65 70 75 80

lle Gin Leu Ser Ser Leu Thr Ser Giu Asp Ser Ala Vai Tyr Phe Cys 85 90 95

Ala Arg Gly Tyr Ala Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr 100 105 110

Leu Val Thr Val Ser Ala 115 <210> 127

<211> 112

<212> PRT

<213> Mus musculus

<400> 127

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Pro Val Thr Pro Gly

1 5 10 15

Glu Ser Val Ser lie Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser 35 40 45

Pro Gln Leu Leu Ile Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg IIe
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95

Leu Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu IIe Lys
100 105 110

<210> 128

<211> 118

<212> PRT

<213> Mus musculus

<400> 128

Gin Val Gin Leu Gin Gin Ser Giy Pro Giu Leu Val Lys Pro Giy Ala 1 5 10 15

Ser Val Lys IIe Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Ser Ser 20 25 30

Trp Met Asn Trp Val Lys Gin Arg Pro Gly Lys Gly Leu Glu Trp lle 35 40 45

Gly Arg lle Tyr Pro Gly Asp Gly Glu Thr Asn Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Asn Thr Ala Tyr 65 70 75 80

Met Gin Leu Ser Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Phe Cys 85 90 95

Ala Arg Gly Phe Gly Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr 100 105 110

Leu Val Thr Val Ser Ala

115

<210> 129

<211> 112

<212> PRT

<213> Mus musculus

<400> 129

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Pro Val Thr Pro Gly

1 5 10 15

Glu Ser Val Ser lie Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser 35 40 45

Pro Gln Leu Leu Ile Tyr Arg Met Ser Asn Leu Ala Ser Gly Ala Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg 11e 75 80

Ser Arg Vai Glu Thr Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95

Leu Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu IIe Lys
100 105 110

<210> 130

⟨211⟩ 118

<212> PRT

<213> Mus musculus

<400> 130

Gin Val Gin Leu Gin Gin Ser Gly Pro Glu Leu Val Lys Pro Gly Ala 1 5 10 15

Ser Val Lys lie Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Ser Ser 20 25 30

Trp Met Asn Trp Val Lys Gin Arg Pro Gly Lys Gly Leu Giu Trp lie 35 40 45

Gly Arg lie Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Asn Gly Lys Phe
50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr 65 70 75 80

Met Gin Leu Ser Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Phe Cys 85 90 95

Ala Ser Gly Tyr Ala Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr

100 105 110

Leu Val Thr Val Ser Ala 115

<210> 131

<211> 112

<212> PRT

<213> Mus musculus

<400> 131

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Pro Val Thr Pro Gly
1 5 10 15

Glu Ser Val Ser lle Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser 35 40 45

Pro Gin Leu Leu lie Tyr Arg Met Ser Asn Leu Ala Ser Giy Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg IIe
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95 Leu Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu lle Lys
100 105 110

<210> 132

⟨211⟩ 118

<212> PRT

<213> Mus musculus

<400> 132

Gin Val Gin Leu Gin Gin Ser Gly Pro Glu Leu Val Lys Pro Gly Ala 1 5 10 15

Ser Val Lys IIe Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Arg Ser 20 25 30

Trp Met Asn Trp Val Lys Gln Arg Pro Gly Lys Gly Leu Glu Trp lle 35 40 45

Gly Arg lie Tyr Pro Gly Asp Gly Asp Thr Asn Tyr Asn Gly Lys Phe 50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
65 70 75 80

Met Gin Leu Ser Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Phe Cys
85 90 95

Ala Ser Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr

100 105 110

Leu Val Thr Val Ser Ala 115

<210> 133 ⋅

<211> 112

<212> PRT

<213> Mus musculus

<400> 133

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Pro Val Thr Pro Gly

1 5 10 15

Glu Ser Val Ser Ile Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser 35 40 45

Pro Gin Leu Leu IIe Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg IIe
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95 Leu Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 134

<211> 118

<212> PRT

<213> Mus musculus

<400> 134

Gin Val Gin Leu Gin Gin Ser Gly Pro Glu Leu Val Lys Pro Gly Ala 1 5 10 15

Ser Val Lys IIe Ser Cys Arg Ala Phe Gly Tyr Ala Phe Ser Asn Ser 20 25 30

Trp Met Asn Trp Val Lys Gln Arg Pro Gly Lys Gly Leu Glu Trp lle 35 40 45

Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr Asn Asn Asn Gly Lys Phe 50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr 65 70 75 80

Met Gin Leu Ser Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Phe Cys 85 90 95 Ala Arg Gly Tyr Gly Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ala 115

<210> 135

<211> 112

<212> PRT

<213> Mus musculus

<400> 135

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Pro Val Thr Pro Gly
1 5 10 15

Glu Ser Val Ser Ile Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser 35 40 45

Pro Gin Leu Leu IIe Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Ala Ala Phe Thr Leu Arg IIe
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His
85 90 95

Leu Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu IIe Lys
100 105 110

<210> 136

<211> 115

<212> PRT

<213> Mus musculus

<400> 136

Gin Val Gin Leu Gin Gin Pro Giy Ala Giu Leu Val Lys Pro Giy Ala 1 5 10 15

Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Trp Val Asn Trp Val Lys Gln Arg Pro Gly Arg Gly Leu Glu Trp Ile 35 40 45

Gly Arg He His Pro Ser Asp Ser Glu Thr His Cys Asn Gln Lys Phe 50 55 60

Lys Arg Lys Ala Thr Leu Thr Val Asn Lys Ser Ser Ser Thr Ala Tyr 65 70 75 80

lle Gin Leu His Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Tyr Cys

85 90 95

Thr Ser Gly Gly Trp Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr 100 105 110

Val Ser Ala

115

⟨210⟩ 137

<211> 112

<212> PRT

<213> Mus musculus

<400> 137

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Pro Val Thr Pro Gly
1 5 10 15

Glu Ser Val Ser lie Ser Cys Arg Ser Ser Lys Ser Leu Leu Tyr Ser 20 25 30

Asn Gly Asn lle Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser 35 40 45

Pro Gin Leu Leu lie Tyr Arg Met Ser Asn Leu Ala Ser Giy Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg 11e 65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95

Leu Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu lle Lys

100 105 110

<210> 138

<211> 118

<212> PRT

<213> Mus musculus

<400> 138

Gin Val Gin Leu Gin Gin Ser Giy Pro Giu Leu Val Lys Pro Giy Ala 1 5 10 15

Ser Val Lys lie Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Ser Ser 20 25 30

Trp Met Asn Trp Val Lys Gln Arg Pro Gly Lys Gly Leu Glu Trp lie
35 40 45

Gly Arg lle Tyr Pro Gly Asp Gly Glu Thr Asn Asn Asn Gly Lys Phe 50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Thr Thr Ala Tyr
65 70 75 80

Met Gin Leu Ser Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Phe Cys
85 90 95

Ala Arg Gly Tyr Gly Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr 100 105 110

Leu Val Thr Val Ser Ala 115

<210> 139

<211> 112

<212> PRT

<213> Mus musculus

<400> 139

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Pro Val Thr Pro Gly

1 5 10 15

Glu Ser Val Ser lie Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser 35 40 45

Pro Gin Leu Leu lie Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro 50 55 60 Asp Arg Phe Ser Gly Ser Gly Ser Gly Ala Ala Phe Thr Leu Arg IIe
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95

Leu Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu lle Lys

100 105 110

<210> 140

<211> 118

<212> PRT

<213> Mus musculus

<400> 140

Gin Val Gin Leu Gin Gin Ser Giy Pro Giu Leu Val Lys Pro Giy Ala 1 5 10 15

Ser Val Lys lie Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Thr Ser 20 25 30

Trp Met Asn Trp Val Lys Gln Arg Pro Gly Lys Gly Leu Glu Trp lle 35 40 45

Gly Arg lie Tyr Pro Gly Asp Gly Glu Ala Asn Tyr Asn Gly Lys Phe 50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Ser Ala Tyr

65 70 75 80

Met Gin Leu Ser Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Phe Cys
85 90 95

Ala Arg Gly Tyr Gly Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr 100 105 110

Leu Val Thr Val Ser Ala 115

<210> 141

<211> 112

<212> PRT

<213> Mus musculus

<400> 141

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Pro Val Thr Pro Gly
1 5 10 15

Glu Ser Val Ser lle Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Met Gln Arg Pro Gly Gln Ser 35 40 45

Pro Gin Leu Leu ile Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro 50 55 60 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg IIe
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His
85 90 95

Val Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu lle Lys

100 105 110

<210> 142

⟨211⟩ 118

<212> PRT

<213> Mus musculus

<400> 142

Gin Val Gin Leu Gin Gin Ser Giy Pro Giu Leu Val Lys Pro Giy Ala 1 5 10 15

Ser Val Lys IIe Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Ser Ser 20 25 30

Trp Met Asn Trp Val Lys Gin Arg Pro Gly Lys Gly Pro Glu Trp lle 35 40 45

Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr Asn Tyr Asn Gly Lys Phe 50 55 60 Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Val Tyr
65 70 75 80

Met Gin Leu Ser Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Phe Cys 85 90 95

Ala Arg Gly Tyr Gly Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr 100 105 110

Leu Vai Thr Vai Ser Ala 115

<210> 143

<211> 112

<212> PRT

<213> Mus musculus

<400> 143

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Pro Val Thr Pro Gly
1 5 10 15

Glu Ser Val Ser lle Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser 35 40 45 Pro Gin Leu Leu lie Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg IIe
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His
85 90 95

Leu Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu IIe Lys
100 105 110

<210> 144

<211> 118

<212> PRT

<213> Mus musculus

<400> 144

Gin Vai Gin Leu Gin Gin Ser Giy Pro Giu Leu Leu Asn Pro Giy Ala 1 5 10 15

Ser Val Lys IIe Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Arg Ser 20 25 30

Trp Met Asn Trp Val Lys Gln Arg Pro Gly Lys Gly Leu Glu Trp lle 35 40 45

Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr Asn Tyr Asn Gly Lys Phe

60

50 55

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Thr Thr Ala Tyr 65 70 75 80

Met Gin Phe Ser Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Phe Cys 85 90 95

Ala Arg Gly Asp Gly Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr 100 105 110

Leu Val Thr Val Ser Ala 115

⟨210⟩ 145

<211> 112

<212> PRT

<213> Mus musculus

<400> 145

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Pro Val Thr Pro Gly
1 5 10 15

Glu Ser Val Ser lie Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser

35 40 45

Pro Gin Leu Leu ile Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg IIe 65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95

Leu Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu IIe Lys
100 105 110

<210> 146

<211> 115

<212> PRT

<213> Mus musculus

<400> 146

Gin Val Gin Leu Gin Gin Pro Giy Thr Giu Leu Val Arg Pro Giy Ala 1 5 10 15

Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
20 25 30

Trp Val Asn Trp Val Lys Gln Arg Pro Gly Arg Gly Leu Glu Trp He
35 40 45

Gly Arg lle His Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe 50 55 60

Lys Asn Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr 65 70 75 80

lle Gin Leu Ser Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Tyr Cys 85 90 95

Ala Ser Gly Gly Trp Phe Ala Ser Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ala 115

<210> 147

<211> 112

<212> PRT

<213> Mus musculus

<400> 147

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Pro Val Thr Pro Gly

1 5 10 15

Glu Ser Val Ser lie Ser Cys Arg Ser Ser Lys Ser Leu Leu Tyr Ser 20 25 30 Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser 35 40 45

Pro Gin Leu Leu IIe Tyr Arg Met Ser Asn Leu Ala Ser Giy Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Thr IIe 65 70 75 80

Ser Ser Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95

Leu Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu lie Lys
100 105 110

<210> 148

<211> 115

<212> PRT

<213> Mus musculus

<400> 148

Gin Val Gin Leu Gin Gin Pro Giy Ala Giu Leu Val Lys Pro Giy Ala 1 5 10 15

Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr 20 25 30 Trp Met Asn Trp Val Lys Gln Arg Pro Gly Arg Gly Leu Glu Trp lle 35 40 45

Gly Arg lle His Pro Phe Asp Ser Glu Thr His Cys Ser Gln Lys Phe 50 55 60

Lys Asn Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Asn Thr Ala Tyr 65 70 75 80

lle Gin Phe Ser Ser Leu Thr Ser Giu Asp Ser Ala Val Tyr Tyr Cys
85 90 95

Ser Ser Gly Gly Trp Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr 100 105 110

Val Ser Ala 115

<210> 149

<211> 112

<212> PRT

<213> Mus musculus

<400> 149

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Ser Val Thr Pro Gly

1 10 15

Glu Ser Val Ser lle Ser Cys Arg Ser Ser Lys Ser Leu Leu Tyr Ser

20 25 30

Asn Gly Asn lie Tyr Leu Tyr Trp Phe Leu Gin Arg Pro Gly Gin Ser 35 40 45

Pro Gln Leu Leu lle Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95

Leu Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu lle Lys
100 105 110

<210> 150

<211> 118

<212> PRT

<213> Mus musculus

<400> 150

Gin Val Gin Leu Gin Gin Ser Gly Pro Glu Leu Val Lys Pro Gly Ala 1 5 10 15

Ser Val Lys lie Ser Cys Lys Ala Ser Gly Tyr Ala Phe Thr Asn Ser 20 25 30 Trp Met Asn Trp Val Arg Gin Arg Pro Gly Lys Gly Leu Glu Trp lie 35 40 45

Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr lie Tyr Asn Gly Lys Phe
50 55 60

Arg Val Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
65 70 75 80

Met Glu IIe Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Phe Cys 85 90 95

Ala Arg Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr

100 105 110

Leu Val Thr Val Ser Ala 115

⟨210⟩ 151

<211> 112

<212> PRT

<213> Mus musculus

<400> 151

Asp lie Val Met Thr Gin Ala Ala Pro Ser Val Pro Val Thr Pro Gly

1 5 10 15

Glu Ser Val Ser lie Ser Cys Arg Ser Ser Lys Ser Leu Leu His Asn 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser 35 40 45

Pro Gin Leu Leu IIe Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg IIe
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95

lle Glu Tyr Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu lle Lys
100 105 110

<210> 152

<211> 118

<212> PRT

<213> Mus musculus

<400> 152

Gin Vai Gin Leu Gin Gin Ser Gly Pro Glu Leu Val Lys Pro Gly Ala 1 5 10 15 Ser Val Lys IIe Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Asn Ser 20 25 30

Trp Met Asn Trp Val Asn Gin Arg Pro Gly Lys Gly Leu Glu Trp lle 35 40 45

Gly Arg lie Tyr Pro Gly Asp Gly Asp Thr lie Tyr Asn Gly Asn Phe
50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Ile Ala Tyr 65 70 75 80

Met Gin Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Vai Tyr Phe Cys
85 90 95

Thr Ser Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ala 115

<210> 153

<211> 112

<212> PRT

<213> Mus musculus

<400> 153

Asp lie Val Met Thr Gin Ala Ala Pro Ser Leu Pro Val Thr Pro Gly

1 5 10 15

Glu Ser Val Ser Ile Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Arg Pro Gly Gln Ser

35 40 45

Pro Gin Leu Leu Ile Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg IIe 65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95

Leu Glu Tyr Pro Tyr Thr Phe Gly Ser Gly Thr Lys Leu Glu lle Lys
100 105 110

<210> 154

<211> 423

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (1).. (423)

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٠,	<400)> 1	54															
	atg	gtt	ctt	gcc	agc	tct	acc	acc	agc	atc	cac	acc	atg	ctg	ctc	ctg		48
į	Met.	Val	Leu	Ala	Ser	Ser	Thr	Thr	Ser	He	His	Thr	Met	Leu	Leu	Leu		
	1	٠.		:	5					10					15			
:					•		•											
•	ctc	ctg	atg	ctg	gcc	cag	ccg	gcc	atg	gcg	gaa	gtg	aag	ctg	gtg	gag		96
•	Leu	Leu	Met	Leu	Ala	Gln	Pro	Ala	Met	Ala	Glu	Val	Lys	Leu	Val	Glu		
			,	20				٠	25					30				
			, .															
	tct	ggg	gga	ggc	tta	gtg	aag	cct	gga	ggg	tcc	cgg	aaa	ctc	tcc	tgt		144
	Ser	Gly	Gly	Gly	Leu	Val	Lys	Pro	Gly	Gly	Ser	Arg	Lys	Leu	Ser	Cys		
	٠		35	•				40					45					
		٠.	•												•			
٠			•			٠												
	gca	gcc	tct	gga	ttc	act	ttc	agt	agc	tat	acc	atg	tct	tgg	gtt	cgc		192
	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Tyr	Thr	Met	Ser	Trp	Val	Arg		
	•	50					55					60				٠	•	
				٠.													•	
	cag	act	ccg	gcg	aag	agg	ctg	gag	tgg	gtc	gca	acc	att	agt	agt	ggc		240
	Gln	Thr	Pro	Ala	Lys	Arg	Leu	Glu	Trp	Val	Ala	Thr	He	Ser	Ser	Gly		
	65	•				70					75					80		
						,												
	agt	agt	acc	atc	tac	tat	gca	gac	aca	gtg	aag	ggc	cga	ttc	acc	atc		288
	Ser	Ser	Thr	He	Tyr	Tyr	Ala	Asp	Thr	Val	Lys	Gly	Arg	Phe	Thr	lle		
			. •		85					90					95			
	tcc	aga	gac	aat	gcc	aag	aac	acc	ctg	ttc	ctg	caa	atg	acc	agt	cta		336
	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Leu	Phe	Leu	Gln	Met	Thr	Ser	Leu		
				100					105					110)			
	agg	tct	gag	gac	aca	gcc	atg	tat	tac	tgt	gca	agg	aga	tgg	ttt	ctt		384
	Arg	Ser	Glu	Asp	Thr	Ala	Met	Tyr	Tyr	Cys	Ala	Arg	Arg	Trp	Phe	Leu		
			115					120					125	;				

gac tgc tgg ggc caa ggc acc act ctc aca gtc tcc tcg Asp Cys Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser <210> 155 (211) 141 <212> PRT <213> Mus musculus **<400> 155** Met Val Leu Ala Ser Ser Thr Thr Ser Ile His Thr Met Leu Leu Leu Leu Leu Met Leu Ala Gin Pro Ala Met Ala Giu Val Lys Leu Val Giu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly Ser Arg Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Thr Met Ser Trp Val Arg Gin Thr Pro Ala Lys Arg Leu Giu Trp Val Ala Thr Ile Ser Ser Gly

Ser Ser Thr lie Tyr Tyr Ala Asp Thr Val Lys Gly Arg Phe Thr lie

Ser	Arg As	Asn	Ala	Lys	Asn	Thr	Leu	Phe	Leu	Gln	Met	Thr	Ser	Leu
		100	•				105					110		•
	14. Ta													

Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala Arg Arg Trp Phe Leu 115 120 125

Asp Cys Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser 130 135 140

<210> 156

<211> 357

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (1).. (357)

<223>

<400> 156

gat att gtg ctc acc caa tct cca gct tct ttg gct gtg tct cta ggg

Asp lie Val Leu Thr Gin Ser Pro Ala Ser Leu Ala Val Ser Leu Gly

1 5 10 15

cag agt gtc acc atc tcc tgc aga gcc agt gaa agt gtt gaa tat tat 96
Gin Ser Vai Thr lie Ser Cys Arg Ala Ser Glu Ser Val Glu Tyr Tyr
20 25 30

ggc act agt tta atg cag tgg tac caa cag aaa cca gga cag cca ccc 144
Gly Thr Ser Leu Met Gln Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

aaa ctc ctc atc tat ggt gca tcc aac gta gaa tct ggg gtc cct gcc 192

	Lys	Leu 50	Leu	lle	Tyr	Gly	Ala 55	Ser	Asn	Val	Glu	Ser 60	Gly	Val	Pro	Ala	•		
	Arg			ggc Gly		Gly					Phe					His		240	
(65					70					75					80		•	
				gag														288	
۱ ا	Pro	Val	Glu	Glu	Asp 85	Asp	ile	Ala	Met	Tyr 90	Phe	Cys	Gln	GIn	Ser 95	Arg			
	٠																	000	
	_			tgg Trp														336	
				100					105					110			- 1,1,1		
	tac	aag	gat	gac	gac	gat	aag	-								•		357	
•	Tyr	Lys	Asp 115	Asp	Asp	Asp	Lys											*	
			.,.										-	•					٠
	<210)>	157																
	<21 1		119																:.
	<212 <213		PRT Mus m	nuscu	ılus														
•	<400)>	157							٠	,							· .	
,	Asp	He	Val	Leu	Thr	GIn	Ser	Pro	Ala	Ser	Leu	Ala	Val	Ser	Leu	Gly		•* •	
	1				5			: .		10					15		•		•
							• :												

Gly Thr Ser Leu Met Gln Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro

Gin Ser Val Thr Ile Ser Cys Arg Ala Ser Glu Ser Val Glu Tyr Tyr

35 40 45

Lys Leu Leu lie Tyr Gly Ala Ser Asn Val Glu Ser Gly Val Pro Ala 50 55 60

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Ser Leu Asn Ile His 65 70 75 80

Pro Val Glu Glu Asp Asp lle Ala Met Tyr Phe Cys Gln Gln Ser Arg 85 90 95

Lys Val Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu IIe Lys Asp 100 105 110

Tyr Lys Asp Asp Asp Lys 115

<210> 158

<211> 432

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (1).. (432)

<223>

<400> 158

atg gtt ctt gcc agc tct acc acc agc atc cac acc atg ctg ctc ctg Met Val Leu Ala Ser Ser Thr Thr Ser Ile His Thr Met Leu Leu Leu

1				5					10					15			
ctc	ctg	atg	ctg	gcc	cag	ccg	gcc	atg	gcg	cag	gtt	cag	ctc	cag	caa		96
		Met															
			20					25					30		•	•	
tct	gga	cct	gag	ctg	gtg	aag	cct	ggg	gcc	tca	gtg	aag	att	tcc	tgc		144
Ser	Gly	Pro	Glu	Leu	Val	Lys	Pro	Gly	Ala	Ser	Val	Lys	He	Ser	Cys		
		35					40					45					·
																•	
aag	gct	tct	ggc	tat	gca	ttc	agt	agc	tcc	tgg	atg	aac	tgg	atg	aag ·		192
Lys	Ala	Ser	Gly	Tyr	Ala	Phe	Ser	Ser	Ser	Trp	Met	Asn	Trp	Met	Lys		
	50					55	•				60				•		-
cag	agg	cct	gga	aag	ggt	ctt	gag	tgg	att	ggg	cgg	att	tat	cct	gga	. :	240
Gln	Arg	Pro	Gly	Lys		Leu	Glu	Trp	lle	Gly	Arg	He	Tyr	Pro	Gly		
65					70					75					80	•	
		gat														٠.	288
Asp	Gly	Asp	Inr		lyr	Asn	GIY	Lys		Lys	Giy	Lys	Aia		Leu	•	
				85					90					95			
aat	" 02	gac	999	tcc	tcc	300	202	acc	tac	atσ	caa	ctc	200	200	ctø		336
	_	Asp				_		_		_		-					
****	AIZ	ЛОР	100	00.	00.	00.		105	.,.	mo c	U 1111		110				
		•															
aca	tct	gag	gac	tct	gcg	gtc	tac	ttc	tgt	gca	aga	gcg	agg	aaa	act		384
		Glu													Thr		
		115					120					125		٠			
tcc	tgg	ttt	gct	tac	tgg	ggc	caa	ggg	act	ctg	gtc	act	gtc	tct	gcg		432
Ser	Trp	Phe	Ala	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ala		
	130					135					140						

<211> 144

<212> PRT

<213> Mus musculus

<400> 159

Met Val Leu Ala Ser Ser Thr Thr Ser lie His Thr Met Leu Leu Leu 1 5 10 15

Leu Leu Met Leu Ala Gin Pro Ala Met Ala Gin Val Gin Leu Gin Gin 20 25 30

Ser Gly Pro Glu Leu Val Lys Pro Gly Ala Ser Val Lys lie Ser Cys 35 40 45

Lys Ala Ser Gly Tyr Ala Phe Ser Ser Ser Trp Met Asn Trp Met Lys
50 55 60

Gin Arg Pro Gly Lys Gly Leu Glu Trp lle Gly Arg lle Tyr Pro Gly
65 70 75 80

Asp Gly Asp Thr Asn Tyr Asn Gly Lys Phe Lys Gly Lys Ala Thr Leu 85 90 95

Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr Met Gin Leu Ser Ser Leu
100 105 110

Thr Ser Glu Asp Ser Ala Val Tyr Phe Cys Ala Arg Ala Arg Lys Thr 115 120 125

Ser	Trp Phe Ala	.Tyr Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ala	
	130		135					140					

<210> 160 <211> 345 <212> DNA <213> Mus musculus <220> <221> CDS <222> (1).. (345) <223> <400> 160 gac att gtg ttg aca cag tct caa aaa ttc atg tcc aca tca gta gga Asp lie Val Leu Thr Gin Ser Gin Lys Phe Met Ser Thr Ser Val Gly 10 15 5 gac agg gtc agc atc agc tgc aag gcc agt cag aat gtg ggt aat att 96 Asp Arg Val Ser lie Ser Cys Lys Ala Ser Gin Asn Val Gly Asn lie 30 20 25 ata gcc tgg tat caa cag aaa cca ggg caa tct cct aaa gca ctg att lle Ala Trp Tyr Gin Gin Lys Pro Gly Gin Ser Pro Lys Ala Leu lle 45 35 40 tac ttg gca tcc tac cgg tac agt gga gtc cct gat cgc ttc aca ggc 192 Tyr Leu Ala Ser Tyr Arg Tyr Ser Gly Val Pro Asp Arg Phe Thr Gly 55 60 50 agt gga tot ggg aca gat tto act ctc acc att agt aat gtg cag tot 240 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Asn Val Gln Ser 65 70 75

gaa gac ttg gca gag tat ttc tgt cag caa tat agc agc tct ccg ctc 288 Glu Asp Leu Ala Glu Tyr Phe Cys Gln Gln Tyr Ser Ser Ser Pro Leu 95 85 90 acg ttc ggt gct ggg acc aag ctg gaa ata aag gac tac aag gat gac 336 Thr Phe Gly Ala Gly Thr Lys Leu Glu IIe Lys Asp Tyr Lys Asp Asp 110 105 345 gac gat aag Asp Asp Lys 115 **<210> 161 <211> 115** <212> PRT **<213>** Mus musculus <400> 161 Asp lie Val Leu Thr Gin Ser Gin Lys Phe Met Ser Thr Ser Val Gly 15 1 . Asp Arg Val Ser ile Ser Cys Lys Ala Ser Gin Asn Val Gly Asn ile 30 20 25 lle Ala Trp Tyr Gin Gin Lys Pro Gly Gin Ser Pro Lys Ala Leu ile 45 35 40

Tyr Leu Ala Ser Tyr Arg Tyr Ser Gly Val Pro Asp Arg Phe Thr Gly

60

55

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr IIe Ser Asn Val Gln Ser 65 70 75 80

Glu Asp Leu Ala Glu Tyr Phe Cys Gln Gln Tyr Ser Ser Ser Pro Leu 85 90 95

Thr Phe Giy Ala Gly Thr Lys Leu Glu lle Lys Asp Tyr Lys Asp Asp 100 105 110

Asp Asp Lys 115

<210> 162

<211> 116

<212> PRT

<213> Mus musculus

<400> 162

Asp Val Gin Leu Gin Giu Ser Giy Pro Giy Leu Val Lys Pro Ser Gin

1 5 10 15

Ser Leu Ser Leu Thr Cys Thr Val Thr Gly Tyr Ser IIe Thr Ser Asp 20 25 30

Tyr Ala Trp Ser Trp lie Arg Gln Leu Pro Gly Asn Lys Leu Glu Trp 35 40 45 Met Gly Tyr lle Thr Tyr Ser Gly Tyr Ser lle Tyr Asn Pro Ser Leu
50 55 60

Lys Ser Arg IIe Ser IIe Ser Arg Asp Thr Ser Lys Asn GIn Leu Phe 65 70 75 80

Leu Gin Leu Asn Ser Val Thr Thr Giu Asp Thr Ala Thr Tyr Tyr Cys

85 90 95

Val Gly Gly Tyr Asp Asn Met Asp Tyr Trp Gly Gln Gly Thr Ser Val

100 105 110

Thr Val Ser Ser 115

<210> 163

<211> 108

<212> PRT

<213> Mus musculus

<400> 163

Gin lie Val Leu Thr Gin Ser Pro Ala lie Met Ser Ala Ser Pro Gly
1 5 10 15

His Leu Tyr Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Leu Trp

35 40 45

lle Tyr Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser 50 55 60

Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr lle Ser Asn Met Glu
65 70 75 80

Thr Glu Asp Ala Ala Ser Tyr Phe Cys His Gln Trp Ser Ser Tyr Pro 85 90 95

Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu IIe Lys 100 105

<210> 164

<211> 1924

<212> DNA

<213> Macaca fascicularis

<220>

<221> CDS

<222> (11).. (1918)

<223>

<400> 164

gaattccacc atg ccc tcc tgg gcc ctc ttc atg gtc acc tcc tgc ctc

Met Pro Ser Trp Ala Leu Phe Met Val Thr Ser Cys Leu

1 5 10

ctc ctg gcc cct caa aac ctg gcc caa gtc agc agc caa gat gtc tcc Leu Leu Ala Pro Gin Asn Leu Ala Gin Val Ser Ser Gin Asp Val Ser 97

ttg	ctg	gcc	tcg	gac	tca	gag	ccc	ctg	aag	tgt	ttc	tcc	cga	aca	ttt	145
Leu	Leu	Ala	Ser	Asp	Ser	Glu	Pro	Leu	Lys	Cys	Phe	Ser	Arg	Thr	Phe	
30		•			35					40					45	
		٠.														•
gag	gac	ctc	act.	tgc	ttc	tgg	gat	gag	gaa	gag	gca	gca	CCC	agt	ggg	193
Glu	Asp	Leu	Thr	Cys	Phe	Trp	Asp	Glu	Glu	Glu	Ala	Ala	Pro	Ser	Gly	
				50					55					60		
									•							
aca	tac	cag	ctg	ctg	tat	gcc	tac	ccg	ggg	gag	aag	ccc	cgt	gcc	tgc	241
Thr	Tyr	GIn	Leu	Leu	Tyr	Ala	Tyr	Pro	Gly	Glu	Lys	Pro	Arg	Ala	Cys	
			65 ·					70					75			
ccc	ctg	agt	tct	cag	agc	gtg	ccc	cgc	ttt	gga	acc	cga	tac	gtg	tgc	289
Pro	Leu	Ser	Ser	Gln	Ser	Val	Pro	Arg	Phe	Gly	Thr	Arg	Tyr	Val	Cys	
		80					85					90				
cag	ttt	cca	gcc	cag	gaa	gaa	gtg	cgt	ctc	ttc	tct	ccg	ctg	cac	ctc	337
Gln	Phe	Pro	Ala	GIn	Glu	Glu	Val	Arg	Leu	Phe	Ser	Pro	Leu	His	Leu	
	95			•		100					105					
tgg	gtg	aag	aat	gtg	ttc	cta	aac	cag	act	cag	att	cag	cga	gtc	ctc	385
Trp	Val	Lys	Asn	Val	Phe	Leu	Asn	Gln	Thr	GIn	He	Gln	Arg	Val	Leu	
110					115					120					125	
ttt	gtg	gac	agt	gta	ggc	ctg	ccg	gct	ccc	ccc	agt	atc	atc	aag	gcc	433
Phe	Va I	Asp	Ser	Val	Gly	Leu	Pro	Ala	Pro	Pro	Ser	He	lle	Lys	Ala	
				130					135					140		
atg	ggt	ggg	agc	cag	cca	ggg	gaa	ctt	cag	atc	agc	tgg	gag	gcc	cca	481
Met	Gly	Gly	Ser	Gln	Pro	Gly	Glu	Leu	GIn	He	Ser	Trp	Glu	Ala	Pro	
			145					150					155	,		
gct	сса	gaa	atc	agt	gat	ttc	ctg	agg	tac	gaa	ctc	cgc	tat	ggc	ccc	529
Ala	Pro	Glu	He	Ser	Asp	Phe	Leu	Arg	Tyr	Glu	Leu	Arg	Tyr	Gly	Pro	

160 165 170

aaa gat ctc aag aac tcc act ggt ccc acg gtc ata cag ttg atc gcc Lys Asp Leu Lys Asn Ser Thr Gly Pro Thr Val Ile Gln Leu Ile Ala aca gaa acc tgc tgc cct gct ctg cag agg cca cac tca gcc tct gct Thr Glu Thr Cys Cys Pro Ala Leu Gln Arg Pro His Ser Ala Ser Ala ctg gac cag tct cca tgt gct cag ccc aca atg ccc tgg caa gat gga Leu Asp Gin Ser Pro Cys Ala Gin Pro Thr Met Pro Trp Gin Asp Gly cca aag cag acc tcc cca act aga gaa gct tca gct ctg aca gca gtg Pro Lys Gin Thr Ser Pro Thr Arg Glu Ala Ser Ala Leu Thr Ala Val ggt gga agc tgc ctc atc tca gga ctc cag cct ggc aac tcc tac tgg Gly Gly Ser Cys Leu lle Ser Gly Leu Gln Pro Gly Asn Ser Tyr Trp ctg cag ctg cgc agc gaa cct gat ggg atc tcc ctc ggt ggc tcc tgg Leu Gin Leu Arg Ser Glu Pro Asp Gly ile Ser Leu Gly Gly Ser Trp gga too tgg too ctc cct gtg act gtg gac ctg cct gga gat gca gtg Gly Ser Trp Ser Leu Pro Val Thr Val Asp Leu Pro Gly Asp Ala Val gca att gga ctg caa tgc ttt acc ttg gac ctg aag aat gtt acc tgt Ala lie Gly Leu Gin Cys Phe Thr Leu Asp Leu Lys Asn Val Thr Cys caa tgg cag caa gag gac cat gct agt tcc caa ggt ttc ttc tac cac

Gin Trp Gin Gin Glu Asp His Ala Ser Ser Gin Gly Phe Phe Tyr His

			305					310	. :				315			
_		gca														1009
Ser	Arg	Ala	Arg	Cys	Cys	Pro	Arg	Asp	Arg	Tyr	Pro	lle	Trp	Glu	Asp	
• •		320					325		•			330				•
	_	gag														1057
Cys	Glu	Gļu	Glu	Glu	Lys	Thr	Asn	Pro	Gly	Leu		Thr	Pro	GIn	Phe	
	335	•				340					345					
-	-	tgc		•												1105
	-	Cys	His	Phe		Ser	Arg	Asn	Asp		Val	He	His	lie		
350			. ,		355				•	360					365	
•	••		•													1150
		gtg														1153
Val	Glu	Val	Thr		A la	Leu	Gly	Ala		His	Ser	lyr	Leu		Ser	
				370		•			375					380		•
												٠.				1201
		tgg -														1201
Pro	Phe	irp		HIS	GIN	Ala	vaı		Leu	Pro	Inr	Pro		Leu	піѕ	
		•	385				•	390					395			
										++~	~~~	+~~	000	000	000	1249
															cca	1245
irp	Arg		He	Ser	Ser	шу	405	Leu	uiu	Leu	uiu	410		1113	Pro	
		400					403					710				
+00	+00	+~~		acc	caa	asa	acc	tac	tat	caa	ctc	CFA	tac	aca	gga	1297
															Gly	1207
Ser		Iτp		ЛІФ	uiii	420	1113	Uys		4111	425			••••	u.,	
	415					720					-720					
g 2 2	ggr	cat	CSE	gac	tee	225	gtø	ctø	gag	CCE	cct	ctc	gge	gco	cga	1345
_															Arg	
430	419	,,,,	J	,p	435	_,5	1			440			,		445	
430					700											

gga ggg acc ctg gag ctg cgc ccg cga tct cgc tac cgt tta cag ctg

Gly Gly Thr Leu Glu Leu Arg Pro Arg Ser Arg Tyr Arg Leu Gln Leu

				450					455					460			
								_							4		1441
		agg															1441
Arg	Ala	Arg		Asn	Gly	Pro	Ihr		Gin	GIY	Pro	irp		ser	urp		
			465					470					475			,	
					~+~	~~~		~~~		~~~	200		+~~	2++	+00		1489
		cca															1403
Ser	ASP	Pro	Ala	At g	Vai	alu	485	міа	1111	ulu	1111	490	ΠP	116	361		
		480					400					430					•
++ σ	σtσ	acc	øct	ctø	ctø	cta	g†ø	ctg	ggC.	ctc	agc	gcc	gtc	ctg	ggo	i	1537
_		Thr												•			
Leu	495	•••				500			u.,		505				•		
	730										•••						٠.
cte	ctg	ctg	ctg	agg	tgg	cag	ttt	cct	gca	cac	tac	agg	aga	ctg	agg	g .	1585
_		Leu															
510					515					520					525	•	•
cat	gcc	ctg	tgg	CCC	tca	ctt	сса	gat	ctg	cac	cga	gtc	cta	ggc	cag	g	1633
His	Ala	Leu	Trp	Pro	Ser	Leu	Pro	Asp	Leu	His	Arg	Val	Leu	Gly	Gli	n	•
				530					535					540)		
												-					· · ·
tac	ctt	agg	gac	act	gca	gcc	ctg	agt	ccg	ccc	aag	gcc	aca	gtc	tc	а	1681
Tyr	Leu	Arg	Asp	Thr	Ala	Ala	Leu	Ser	Pro	Pro	Lys	Ala	Thr	Val	Se	r	
			545					550					555	j	•		
	•	•															• •
gat	acc	tgt	gaa	gaa	gtg	gaa	ccc	agc	ctc	ctt	gaa	atc	cto	ccc	aa	g .	1729
Asp	Thr	Cys	Glu	Glu	Val	Glu	Pro	Ser	Leu	Leu	Glu	He	Leu	Pro	Ly	s	
		560					565					570)				
							•									•	
tcc	tca	gag	agg	act	cct	ttg	CCC	ctg	tgt	tcc	tcc	cag	tcc	cag	g at	g	1777
Ser	Ser	Glu	Arg	Thr	Pro	Leu	Pro	Leu	Cys	Ser	Ser	Gin	Ser	Gir	n Me	t	
	575					580					585						
gac	tac	cga	aga	ttg	cag	cct	tct	tgc	ctg	ggg	acc	atg	CCC	cte	g tc	t	1825

Asp Tyr Arg Arg Leu Gln Pro Ser Cys Leu Gly Thr Met Pro Leu Ser

590	,	595		. 600			605
gtg tgc cca Val Cys Pro							
gcc aac cat		cta cca	cta agc		cag cag		1918
Ala Asn His				Tyr Trp	Gin Gin		
gtcgac							1924
<210> 165							
<211> 635 <212> PRT	ca fascio	oularie				•	
<213> Maca	Ga lasti	culai is					
<400> 165							
Met Pro Ser	·		Met Val		Cys Leu		Ala
	Trp Ala 5		Met Val	Thr Ser 10	Cys Leu	Leu Leu 15	Ala
Met Pro Ser	5	Leu Phe		10		15.	
Met Pro Ser 1	5 Leu Ala 20	Leu Phe Gin Val	Ser Ser 25	10 Gin Asp	Val Ser	15 Leu Leu 30	Ala

Leu Leu Tyr Ala Tyr Pro Gly Glu Lys Pro Arg Ala Cys Pro Leu Ser 65 70 75 80

Ser Gin Ser Val Pro Arg Phe Gly Thr Arg Tyr Val Cys Gin Phe Pro 85 90 95

Ala Gin Giu Giu Val Arg Leu Phe Ser Pro Leu His Leu Trp Val Lys
100 105 110

Asn Val Phe Leu Asn Gin Thr Gin IIe Gin Arg Val Leu Phe Val Asp 115 120 125

Ser Val Gly Leu Pro Ala Pro Pro Ser lie lie Lys Ala Met Gly Gly 130 135 140

Ser Gin Pro Giy Giu Leu Gin He Ser Trp Giu Ala Pro Ala Pro Giu 145 150 155 160

lle Ser Asp Phe Leu Arg Tyr Glu Leu Arg Tyr Gly Pro Lys Asp Leu 165 170 175

Lys Asn Ser Thr Gly Pro Thr Val IIe Gln Leu IIe Ala Thr Glu Thr 180 185 190

Cys Cys Pro Ala Leu Gin Arg Pro His Ser Ala Ser Ala Leu Asp Gin 195 200 205 Ser Pro Cys Ala Gin Pro Thr Met Pro Trp Gin Asp Gly Pro Lys Gin 210 215 220

Thr Ser Pro Thr Arg Glu Ala Ser Ala Leu Thr Ala Val Gly Gly Ser 225 230 235 240

Cys Leu IIe Ser Gly Leu Gln Pro Gly Asn Ser Tyr Trp Leu Gln Leu 245 250 255

Arg Ser Glu Pro Asp Gly IIe Ser Leu Gly Gly Ser Trp Gly Ser Trp
260 265 270

Ser Leu Pro Val Thr Val Asp Leu Pro Gly Asp Ala Val Ala Ile Gly 275 280 285

Leu Gin Cys Phe Thr Leu Asp Leu Lys Asn Vai Thr Cys Gin Trp Gin 290 295 300

Gln Glu Asp His Ala Ser Ser Gln Gly Phe Phe Tyr His Ser Arg Ala 305 310 315 320

Arg Cys Cys Pro Arg Asp Arg Tyr Pro 11e Trp Glu Asp Cys Glu Glu
325 330 335

Glu Glu Lys Thr Asn Pro Gly Leu Gln Thr Pro Gln Phe Ser Arg Cys 340 345 350 His Phe Lys Ser Arg Asn Asp Ser Val IIe His IIe Leu Val Glu Val
355 360 365

Thr Thr Ala Leu Gly Ala Val His Ser Tyr Leu Gly Ser Pro Phe Trp 370 375 380

Ile His Gln Ala Val Arg Leu Pro Thr Pro Asn Leu His Trp Arg Glu 385 390 395 400

lle Ser Ser Gly His Leu Glu Leu Glu Trp Gln His Pro Ser Ser Trp
405 410 415

Ala Ala Gin Giu Thr Cys Tyr Gin Leu Arg Tyr Thr Gly Giu Gly His
420 425 430

Gin Asp Trp Lys Val Leu Giu Pro Pro Leu Gly Ala Arg Gly Gly Thr 435 440 445

Leu Glu Leu Arg Pro Arg Ser Arg Tyr Arg Leu Gln Leu Arg Ala Arg 450 455 460

Leu Asn Gly Pro Thr Tyr Gln Gly Pro Trp Ser Ser Trp Ser Asp Pro 465 470 475 480

Ala Arg Val Glu Thr Ala Thr Glu Thr Ala Trp lle Ser Leu Val Thr
485 490 495

Ala Leu Leu Val Leu Gly Leu Ser Ala Val Leu Gly Leu Leu Leu 500 505 510

Leu Arg Trp Gln Phe Pro Ala His Tyr Arg Arg Leu Arg His Ala Leu 515 520 525

Trp Pro Ser Leu Pro Asp Leu His Arg Val Leu Gly Gln Tyr Leu Arg 530 535 540

Asp Thr Ala Ala Leu Ser Pro Pro Lys Ala Thr Val Ser Asp Thr Cys 545 550 555 560

Glu Glu Val Glu Pro Ser Leu Leu Glu IIe Leu Pro Lys Ser Ser Glu

565 570 575

Arg Thr Pro Leu Pro Leu Cys Ser Ser Gin Ser Gin Met Asp Tyr Arg 580 585 590

Arg Leu Gin Pro Ser Cys Leu Gly Thr Met Pro Leu Ser Val Cys Pro 595 600 605

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30

Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr lie Tyr Asn Gly Lys Phe 50 55 60

Arg Val Arg Val Thr IIe Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

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Ala Arg Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr

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Thr Val Thr Val Ser Ser 115

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Val

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tcaggggtcc ctgacaggtt cagtggcagt ggatcaggca cagcttttac actgaaaatc 240
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Leu Leu Ala Pro Gin Asn Leu Ala Gin Val Ser Ser Gin Asp V	al Ser
15 20 25	·
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Leu Leu Ala Ser Asp Ser Glu Pro Leu Lys Cys Phe Ser Arg 1	hr Phe
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Glu Asp Leu Thr Cys Phe Trp Asp Glu Glu Glu Ala Ala Pro S	Ser Gly
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Thr Tyr Gin Leu Leu Tyr Ala Tyr Pro Arg Giu Lys Pro Arg	la Cys
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Pro Leu Ser Ser Gin Ser Met Pro His Phe Gly Thr Arg Tyr	Val Cys
80 85 90	
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Gin Phe Pro Asp Gin Giu Giu Vai Pro Leu Phe Phe Pro Leu	His Leu

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ggt gga agc tgc ctc atc tca gga ctc cag cct ggc aac tcc tac tgg

Gly Gly Ser Cys Leu Ile Ser Gly Leu Gln Pro Gly Asn Ser Tyr Trp

ctg cag ctg cgc agc gaa cct gat ggg atc tcc ctc ggt ggc tcc tgg Leu Gin Leu Arg Ser Giu Pro Asp Giy lie Ser Leu Giy Giy Ser Trp gga too tgg too ctc cct gtg act gtg gac ctg cct gga gat gca gtg Gly Ser Trp Ser Leu Pro Val Thr Val Asp Leu Pro Gly Asp Ala Val gca ctt gga ctg caa tgc ttt acc ttg gac ctg aag aat gtt acc tgt Ala Leu Gly Leu Gln Cys Phe Thr Leu Asp Leu Lys Asn Val Thr Cys caa tgg cag caa cag gac cat gct agc tcc caa ggc ttc ttc tac cac Gin Trp Gin Gin Gin Asp His Ala Ser Ser Gin Gly Phe Phe Tyr His ago agg goa ogg tgo tgo coc aga gac agg tac coc ato tgg gag aac Ser Arg Ala Arg Cys Cys Pro Arg Asp Arg Tyr Pro lie Trp Glu Asn tgc gaa gag gaa gag aaa aca aat cca gga cta cag acc cca cag ttc Cys Glu Glu Glu Lys Thr Asn Pro Gly Leu Gln Thr Pro Gln Phe tct cgc tgc cac ttc aag tca cga aat gac agc att att cac atc ctt Ser Arg Cys His Phe Lys Ser Arg Asn Asp Ser Ile Ile His Ile Leu gtg gag gtg acc aca gcc ccg ggt act gtt cac agc tac ctg ggc tcc Val Glu Val Thr Thr Ala Pro Gly Thr Val His Ser Tyr Leu Gly Ser

cct ttc tgg atc cac cag gct gtg cgc ctc ccc acc cca aac ttg cac

Pro Phe Trp Ile His Gln Ala Val Arg Leu Pro Thr Pro Asn Leu His

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	Tyr	Leu	Arg	Asp	Thr	Ala	Ala	Leu	Ser	Pro	Pro	Lys	Ala	Thr	Vai	Ser		
	-			545					550					555				
	•		٠. ٠															
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	Asp	Tyr	Arg	Arg	Leu	Gln	Pro	Ser	Cys	Leu	Gly	Thr	Met	Pro	Leu	Ser		
٠.	590		٠.			595					600					605		
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	ΫaΙ	Cys	Pro	Pro	Met	Ala	Glu	Ser	Gly	Ser	Cys	Cys	Thr	Thr	His	He		
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	Ala	Asn	His	Ser	Tyr	Leu	Pro	Leu	Ser	Tyr	Trp	GIn	Gin	Pro				
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Ser Asp Ser Glu Pro Leu Lys Cys Phe Ser Arg Thr Phe Glu Asp Leu 35 40 45

Thr Cys Phe Trp Asp Glu Glu Glu Ala Ala Pro Ser Gly Thr Tyr Gln
50 55 60

Leu Leu Tyr Ala Tyr Pro Arg Glu Lys Pro Arg Ala Cys Pro Leu Ser
65 70 75 80

Ser Gln Ser Met Pro His Phe Gly Thr Arg Tyr Val Cys Gln Phe Pro 85 90 95

Asp Gin Giu Giu Val Pro Leu Phe Phe Pro Leu His Leu Trp Val Lys
100 105 110

Asn Val Phe Leu Asn Gln Thr Arg Thr Gln Arg Val Leu Phe Val Asp 115 120 125

Ser Val Gly Leu Pro Ala Pro Pro Ser lle lle Lys Ala Met Gly Gly 130 135 140 Ser Gin Pro Gly Glu Leu Gin IIe Ser Trp Glu Glu Pro Ala Pro Glu

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245 250 255

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His Phe Lys Ser Arg Asn Asp Ser lle lle His lle Leu Val Glu Val
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Leu Arg Trp Gln Phe Pro Ala His Tyr Arg Arg Leu Arg His Ala Leu 515 520 525

Trp Pro Ser Leu Pro Asp Leu His Arg Val Leu Gly Gln Tyr Leu Arg 530 535 540

Asp Thr Ala Ala Leu Ser Pro Pro Lys Ala Thr Val Ser Asp Thr Cys 545 550 555 560

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Leu	Leu	Ala	Ser	Asp	Ser	Glu	Pro	Leu	Lys	Cys	Phe	Ser	Arg	Thr	Phe		
30					35					40					45		
50																	
		4	+	+~~	++^	+ a a	aa+	σaσ	gaa.	gag	g C S	g C. g	ccc	agt	ggg	19	93
Glu	Asp	Leu	Ihr		Phe	ırp	ASP	GIU	_	Glu	AIA	міа	rio		uly		
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Thr	Tyr	Gln	Leu	Leu	Tyr	Ala	Tyr	Pro	Arg	Glu	Lys	Pro	Arg	Ala	Cys		
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										Gly							
Pro	Leu		361	u	001		85			,	***	90		,			• :
		80					00										
															o+o	2	37
															ctc	J	
Gln	Phe	Pro	Asp	Gln	Glu	Glu	Val	Arg	Leu	Phe	Phe	Pro	Leu	HIS	Leu	٠,	
	95					100					105						
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tgg	gtg	aag	aat	gtg	ttc	cta	aac	cag	act	cgg	act	cag	cga	gto	ctc	3	3 85
Trp	Val	Lys	Asn	Vai	Phe	Leu	Asn	GIn	Thr	Arg	Thr	Gln	Arg	Vai	Leu		
110					115					120	•				125	•	
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190					150												
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Leu	ASP	din	361	210	Uys	Ala	U		215					220			
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Pro	Lys	uin		Ser	Pro	Sei	AIE	230	AIQ.	961	Λια	LOU	235	۰۰,۰۰			1.4
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Gly	Gly			Leu	1 ie	Ser			uiii	FIU	uly	250		131	Trp		
		240					245					250					• •
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Leu			Cys	Ser	Glu		ASP	GIY	116	Ser			шу	361	Trp		
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270					275					280	,	•			285		
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Ala	Leu	Gly	Leu			Phe	Thr	Leu			I Lys	s Asr	ı va		c Cys		
				290					295)	•			300	J		
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GIn	Trp	Gin	GIn	Gln	Asp	His	Ala			Glr	ı Gly	y Phe			r His	}	
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Cys		GIU	GIU	GIU	Lys		ASII	Pro	Gly	Leu		1111	F1 0	um	1116		
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,	u.u	,		370			,		375					380			
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361			ДІЦ	714	4111	420	••••	,	.,.	••••	425						. •
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,				450					455					460)		
000	T 00	200	cto	220	gge	.ccc	acc	tac	Caa	po+	CCC	† <i>5</i> 0	g ggn	tce	tgg		1441
GRG	guu	agg	ULU	aav	88°		200	.40	Jua	95 L	. 500	-55	,	6	-55		

Arg	Ala	Arg	Leu 465	Asn	Gly	Pro	Thr	Tyr 470	GIn	Gly	Pro	Trp	Ser 475	Ser	Trp		
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		480					485					490					
						cta											1537
Leu	495	inr	AIA	Leu	піѕ	Leu 500	Vai	Leu	шу	Leu	505	ЛІА	V a1	Leu	uiy	٠.,	
	433					000									. '		
ctg	ctg	ctg	ctg	agg	tgg	cag	ttt	cct	gca	cac	tac	agg	aga	ctg	agg		1585
Leu	Leu	Leu	Leu	Arg	Trp	GIn	Phe	Pro	Ala	His	Tyr	Arg	Arg	Leu	Arg		
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																• •	1000
															cag		1633
His	Ala	Leu	ırp	530	Ser	Leu	Pro	ASP	535	піѕ	Arg	vai	Leu	540			
			•	550					555					040			• •
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															aag		1729
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Asp	Tyr	Arg	Arg	Leu			Ser	Cys	Leu			Met	Pro	Leu	Ser		
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Leu Leu Tyr Ala Tyr Pro Arg Glu Lys Pro Arg Ala Cys Pro Leu Ser

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70

65

80

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Lys Asn Ser Thr Gly Pro Thr Val IIe Gin Leu IIe Ala Thr Glu Thr 180 185 190

Cys Cys Pro Ala Leu Gin Arg Pro His Ser Ala Ser Ala Leu Asp Gin 195 200 205

Ser Pro Cys Ala Gin Pro Thr Met Pro Trp Gin Asp Gly Pro Lys Gin 210 215 220 Thr Ser Pro Ser Arg Glu Ala Ser Ala Leu Thr Ala Glu Gly Gly Ser 225 230 235 240

Cys Leu lie Ser Gly Leu Gin Pro Gly Asn Ser Tyr Trp Leu Gin Leu 245 250 255

Cys Ser Glu Pro Asp Gly Ile Ser Leu Gly Gly Ser Trp Gly Ser Trp
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Leu Gin Cys Phe Thr Leu Asp Leu Lys Asn Val Thr Cys Gin Trp Gin 290 295 300

Gin Gin Asp His Ala Ser Ser Gin Gly Phe Phe Tyr His Ser Arg Ala 305 310 315 320

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325 330 335

Glu Glu Lys Thr Asn Pro Gly Leu Gln Thr Pro Gln Phe Ser Arg Cys 340 345 350

His Phe Lys Ser Arg Asn Asp Ser IIe IIe His IIe Leu Val Glu Val 355 360 365

Thr Thr Ala Pro Gly Thr Val His Ser Tyr Leu Gly Ser Pro Phe Trp 370 375 380

Ile His Gln Ala Val Arg Leu Pro Thr Pro Asn Leu His Trp Arg Glu 385 390 395 400

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Gin Asp Trp Lys Val Leu Giu Pro Pro Leu Giy Ala Arg Giy Giy Thr 435 440 445

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Leu Asn Gly Pro Thr Tyr Gln Gly Pro Trp Ser Ser Trp Ser Asp Pro 465 470 475 480

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Trp Pro Ser Leu Pro Asp Leu His Arg Val Leu Gly Gln Tyr Leu Arg 530 535 540

Asp Thr Ala Ala Leu Ser Pro Pro Lys Ala Thr Val Ser Asp Thr Cys 545 550 555 560

Glu Glu Val Glu Pro Ser Leu Leu Glu IIe Leu Pro Lys Ser Ser Glu 565 570 575

Arg Thr Pro Leu Pro Leu Cys Ser Ser Gln Ala Gln Met Asp Tyr Arg 580 585 590

Arg Leu Gin Pro Ser Cys Leu Gly Thr Met Pro Leu Ser Val Cys Pro 595 600 605

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Leu	Leu	Ala	Pro	Gin	Asn	Leu	Ala	GIn	Val			GIn	Asp	Vai	Ser		
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Leu	Leu	Ala	Ser	Asp	Ser	Glu	Pro	Leu	Lys		Phe	Ser	Arg	Thr			
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GIn	Phe	Pro	Asp	GIn	Glu	Glu	Val	Arg	Leu	Phe			Leu	His	Leu		
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Pr	b Lys	Gln	Thr	Ser	Pro	Ser	Arg	Glu	Ala	Ser	Ala	Leu	Thr	- Ala	Glu	
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Gi	y Gly	Ser	Cys	Leu	He	Ser	Gly	Leu	Gln	Pro	Gly	/ Asr	Ser	- Tyı	r Trp	
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- •	·			450					455					460		
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Asp Thr Cys Glu Glu V	al Glu Pro Ser	Leu Leu Glu ile	Leu Pro Lys
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Ser Ser Glu Arg Thr P	ro Leu Pro Leu	Cys Ser Ser Gin	Ala Gin Met
575	580	585	
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Asp Tyr Arg Arg Leu G		•	•
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Val Cys Pro Pro Met A			
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Thr Cys Phe Trp Asp Glu Glu Glu Ala Ala Pro Ser Gly Thr Tyr Gln 50 55 60

Leu Leu Tyr Ala Tyr Pro Arg Glu Lys Pro Arg Ala Cys Pro Leu Ser
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Ser Gln Ser Met Pro His Phe Gly Thr Arg Tyr Val Cys Gln Phe Pro 85 90 95

Asp Gin Giu Giu Vai Arg Leu Phe Phe Pro Leu His Leu Trp Val Lys
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Ser Val Gly Leu Pro Ala Pro Pro Ser IIe IIe Lys Ala Met Gly Gly 130 135 140

Ser Gin Pro Gly Glu Leu Gin IIe Ser Trp Glu Glu Pro Ala Pro Glu

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lle Ser Asp Phe Leu Arg Tyr Glu Leu Arg Tyr Gly Pro Arg Asp Pro 165 170 175

Lys Asn Ser Thr Gly Pro Thr Val IIe Gln Leu IIe Ala Thr Glu Thr 180 185 190

Cys Cys Pro Ala Leu Gln Arg Pro His Ser Ala Ser Ala Leu Asp Gln 195 200 205

Ser Pro Cys Ala Gin Pro Thr Met Pro Trp Gin Asp Gly Pro Lys Gin 210 215 220

Thr Ser Pro Ser Arg Glu Ala Ser Ala Leu Thr Ala Glu Gly Gly Ser 225 230 235 240

Cys Leu lie Ser Gly Leu Gln Pro Gly Asn Ser Tyr Trp Leu Gln Leu 245 250 255

Arg Ser Glu Pro Asp Gly He Ser Leu Gly Gly Ser Trp Gly Ser Trp 260 265 270

Ser Leu Thr Val Thr Val Asp Leu Pro Gly Asp Ala Val Ala Leu Gly
275 280 285

Leu Gin Cys Phe Thr Leu Asp Leu Lys Asn Val Thr Cys Gin Trp Gin 290 295 300 Gln Gln Asp His Ala Ser Ser Gln Gly Phe Phe Tyr His Ser Arg Ala 305 310 315 320

Arg Cys Cys Pro Arg Asp Arg Tyr Pro IIe Trp Glu Asn Cys Glu Glu
325 330 335

Glu Glu Lys Thr Asn Pro Gly Leu Gln Thr Pro Gln Phe Ser Arg Cys 340 345 350

His Phe Lys Ser Arg Asn Asp Ser IIe IIe His IIe Leu Val Glu Val 355 360 365

Thr Thr Ala Pro Gly Thr Val His Ser Tyr Leu Gly Ser Pro Phe Trp 370 375 380

Ile His Gln Ala Val Arg Leu Pro Thr Pro Asn Leu His Trp Arg Glu 385 390 395 400

Ile Ser Ser Gly His Leu Glu Leu Glu Trp Gln His Pro Ser Ser Trp
405 410 415

Ala Ala Gin Giu Thr Cys Tyr Gin Leu Arg Tyr Thr Gly Giu Gly His
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Gin Asp Trp Lys Vai Leu Giu Pro Pro Leu Gly Ala Arg Gly Gly Thr 435 440 445 Leu Glu Leu Arg Pro Arg Ser Arg Tyr Arg Leu Gln Leu Arg Ala Arg 450 455 460

Leu Asn Gly Pro Thr Tyr Gln Gly Pro Trp Ser Ser Trp Ser Asp Pro
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Thr Arg Val Glu Thr Ala Thr Glu Thr Ala Trp lle Ser Leu Val Thr
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Ala Leu His Leu Val Leu Gly Leu Ser Ala Val Leu Gly Leu Leu Leu 500 505 510

Leu Arg Trp Gln Phe Pro Ala His Tyr Arg Arg Leu Arg His Ala Leu
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Trp Pro Ser Leu Pro Asp Leu His Arg Val Leu Gly Gln Tyr Leu Arg 530 535 540

Asp Thr Ala Ala Leu Ser Pro Pro Lys Ala Thr Val Ser Asp Thr Cys
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Glu Glu Val Glu Pro Ser Leu Leu Glu IIe Leu Pro Lys Ser Ser Glu 565 570 575

Arg Thr Pro Leu Pro Leu Cys Ser Ser Gin Ala Gin Met Asp Tyr Arg 580 585 590 Arg Leu Gin Pro Ser Cys Leu Giy Thr Met Pro Leu Ser Val Cys Pro 595 600 605

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Thr Asn Ser Trp Met Asn Trp Val Arg Gin Arg Pro Gly Lys Gly Leu 50 55 60

Glu Trp Val Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr lie Tyr Asn

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Gly Gly Ser Gly Gly Gly Ser Asp lle Val Met Thr Gln Ser Ala 145 150 155 160

Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg 165 170 175

Ser Ser Lys Ser Leu Leu His Ser Asn Gly Asn Thr Tyr Leu Tyr Trp 180 185 190

Tyr Leu Gin Lys Pro Giy Gin Ser Pro Gin Leu Leu lie Tyr Arg Met 195 200 205

Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser 210 215 220

Gly Thr Ala Phe Thr Leu Lys IIe Ser Arg Val Glu Ala Glu Asp Val 225 230 235 240

Gly Val Tyr Tyr Cys Met Gln His Ile Glu Tyr Pro Phe Thr Phe Gly

245 250 255

Gin Gly Thr Lys Leu Glu lie Lys Gly Gly Gly Gly Ser Gly Gly Gly
260 265 270

Gly Ser Gly Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Pro 275 280 285

Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser 290 295 300

Gly Tyr Thr Phe Thr Asn Ser Trp Met Asn Trp Val Arg Gln Arg Pro 305 310 315 320

Gly Lys Gly Leu Glu Trp Val Gly Arg Ile Tyr Pro Gly Asp Gly Glu 325 330 335

Thr lie Tyr Asn Gly Lys Phe Arg Val Arg Val Thr lie Thr Ala Asp 340 345 350

Glu Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu 355 360 365

Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Tyr Asp Asp Tyr Ser Phe 370 375 380

Ala Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly

385 390 395 400

Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp ile Val Met 405 410 415

Thr Gin Ser Ala Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser 420 425 430

lle Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser Asn Gly Asn Thr
435 440 445

Tyr Leu Tyr Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu 450 455 460

lle Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser 465 470 475 480

Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Lys IIe Ser Arg Val Glu 485 490 495

Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His lle Glu Tyr Pro
500 505 510

Phe Thr Phe Gly Gln Gly Thr Lys Leu Glu IIe Lys
515 520

<211> 354					. *
<212> DNA					•
<213> Homo sa	ıp i ens				
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•				٠.	
cctggaaagg gto	ttgagtg ggttggacg	gg atttatcctg	gagatggaga a	aactatctac	180
					240
aatgggaaat tca	agggtcag agtcacgat	t accgcggacg	aatccacgag (cacagcctac	240
	ngcctgag atctgagga	ec acaaccatat	attactetec	gagaggetat	300
atggagetga gea	igoolgag alolgagga	o auggoogigi	attaotgtgo	Bababbotat	
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gargarraor og c					
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<211> 118					:
<212> PRT		•			·
<213> Homo sa	apiens				
	•		•		
<400> 256				:	·
Gin Val Gin Le	eu Val Gin Ser Gi		Lys Lys Pro		
1	5	10		15	
					•

Trp Met Asn Trp Val Arg Gln Arg Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Ser

20

30

Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr lie Tyr Asn Gly Lys Phe 50 55 60

Arg Val Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr 100 105 110

Thr Vai Thr Vai Ser Ser 115

<210> 257

<211> 336

<212> DNA

<213> Homo sapiens

<400> 257

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tacctgcaga agccagggca gtctccacag ctcctgatct atcggatgtc caaccttgcc 180
tcaggggtcc ctgacaggtt cagtggcagt ggatcaggca cagcttttac actgaaaatc 240
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tttacgttcg gccaagggac caaactggaa atcaaa

336

<210> 258

⟨211⟩ 112

<212> PRT

<213> Homo sapiens

<400> 258

Asp lie Val Met Thr Gin Ser Ala Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

Glu Pro Ala Ser lle Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Tyr Leu Gln Lys Pro Gly Gln Ser 35 40 45

Pro Gin Leu Leu ile Tyr Arg Met Ser Asn Leu Ala Ser Giy Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Lys 1le 65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95

lle Glu Tyr Pro Phe Thr Phe Gly Gln Gly Thr Lys Leu Glu lle Lys

100 105 110

<210> 259

<211> 1572

<212> DNA

<213> Homo sapiens

<400> 259

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gtgcagctgg	tgcagtctgg	acctgaggtg	aagaagcctg	gggcctcagt	gaaggtctcc	900
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ggaaagggtc	ttgagtggat	tggacggatt	tatcctggag	atggagaaac	tatctacaat	1020
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gagctgagca	gcctgagatc	tgaggacacg	gccgtgtatt	actgtgcgag	aggctatgat	1140
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ccacagetee	tgatctatcg	gatgtccaac	cttgcctcag	gggtccctga	caggttcagt	1440
ggcagtggat	caggcacagc	ttttacactg	aaaatcagca	gagtggaggc	tgaggatgtt	1500
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ctggaaatca	aa			•		1572

<210> 260

<211> 524

<212> PRT

<213≻ Homo sapiens

<400> 260

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly

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Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe 35 40 45

Thr Asn Ser Trp Met Asn Trp lie Arg Gin Arg Pro Gly Lys Gly Leu 50 55 60

Glu Trp lie Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr lie Tyr Asn 65 70 75 80

Gly Lys Phe Arg Val Arg Val Thr lle Thr Ala Asp Glu Ser Thr Ser 85 90 95

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val 100 105 110

Tyr Tyr Cys Ala Arg Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly
115 120 125

Gin Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 130 135 140 Gly Gly Ser Gly Gly Gly Gly Ser Asp lie Val Met Thr Gln Ser Ala 145 150 155 160

Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg 165 170 175

Ser Ser Lys Ser Leu Leu His Ser Asn Gly Asn Thr Tyr Leu Tyr Trp 180 185 190

Tyr Leu Gin Lys Pro Giy Gin Ser Pro Gin Leu Leu lie Tyr Arg Met 195 200 205

Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser 210 215 220

Gly Thr Ala Phe Thr Leu Lys I le Ser Arg Val Glu Ala Glu Asp Val 225 230 235 240

Gly Val Tyr Tyr Cys Met Gln His IIe Glu Tyr Pro Phe Thr Phe Gly
245 250 255

Gin Gly Thr Lys Leu Glu IIe Lys Gly Gly Gly Gly Ser Gly Gly Gly
260 265 270

Gly Ser Gly Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Pro 275 280 285 Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser 290 295 300

Gly Tyr Thr Phe Thr Asn Ser Trp Met Asn Trp lle Arg Gln Arg Pro 305 310 315 320

Gly Lys Gly Leu Glu Trp lle Gly Arg lle Tyr Pro Gly Asp Gly Glu 325 330 335

Thr lie Tyr Asn Gly Lys Phe Arg Val Arg Val Thr lie Thr Ala Asp 340 345 350

Glu Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu 355 360 365

Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Tyr Asp Asp Tyr Ser Phe 370 375 380

Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 385 390 395 400

Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Asp lie Val Met
405 410 415

Thr Gin Ser Ala Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser 420 425 430 Ile Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser Asn Gly Asn Thr
435 440 445

Tyr Leu Tyr Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu
450 455 460

lle Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser 465 470 475 480

Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Lys lie Ser Arg Val Glu 485 490 495

Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His lie Glu Tyr Pro
500 505 510

Phe Thr Phe Gly Gln Gly Thr Lys Leu Glu IIe Lys
515 520

<210> 261

<211> 354

<212> DNA

<213> Homo sapiens

<400> 261

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60

cctggaaagg gtcttgagtg gattggacgg atttatcctg gagatggaga aactatctac 180

	• '
aatgggaaat tcagggtcag agtcacgatt accgcggac	g aatccacgag cacagcctac
atggagotga goagootgag atotgaggao acggoogtg	t attactgtgc gagaggctat
area and a second and a second and a second a se	
gatgattact cgtttgctta ctggggccag ggaaccctg	g tcaccgtctc ttca
<210> 262	
<211> 118	· • • •
<212> PRT	
<213> Homo sapiens	
<400> 262	
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Gin Val Gin Leu Val Gin Ser Gly Pro Glu Va	15
5. 10	19
Wall Can One Luc Ale Can Chy Ty	r Thr Dha Thr Asn Sar
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Ty 20 25	30
20 25	30
Trp Met Asn Trp lie Arg Gln Arg Pro Gly Ly	ro Gly Leu Glu Tro lle
	45
35 40	40
Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr II	e Tvr Asn Glv Lvs Phe
50 55	60
50	
Arg Val Arg Val Thr lie Thr Ala Asp Glu Se	er Thr Ser Thr Ala Tvr
65 70 /5	, •••

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr 100 105 110

Leu Val Thr Val Ser Ser 115

<210> 263

<211> 1572

<212> DNA

<213> Mus musculus

<400> 263

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cctcaactcc	tgatatatcg	gatgtccaac	cttgcctcag	gagtcccaga	taggttcagt	660
ggcagtgggt	caggaactgc	tttcacactg	agaatcagta	gagtggaggc	tgaggatgtg	720
ggtgtttatt	actgtatgca	acatatagaa	tatcctttta	cgttcggatc	ggggaccaag	780
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ccctctatac	ctgtcactcc	tggagagtca	gtatccatct	cctgtaggto	: tagtaagagt	1320
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cctcaactc	; tgatatatcg	gatgtccaac	cttgcctcag	g gagtcccaga	a taggttcagt	1440
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Thr Ala Tyr Met Asp Ile Ser Ser Leu Thr Ser Glu Asp Ser Ala Val

Gly Lys Phe Arg Val Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser

Tyr Phe Cys Ala Arg Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly

Gin Gly Thr Leu Val Thr Val Ser Ala Gly Gly Gly Gly Ser Gly Gly 130 135 140

Gly Gly Ser Gly Gly Gly Ser Asp lle Val Met Thr Gln Ala Ala 145 150 155 160

Pro Ser lie Pro Val Thr Pro Gly Glu Ser Val Ser lie Ser Cys Arg 165 170 175

Ser Ser Lys Ser Leu Leu His Ser Asn Gly Asn Thr Tyr Leu Tyr Trp

180 185 190

Phe Leu Gin Arg Pro Gly Gin Ser Pro Gin Leu Leu lie Tyr Arg Met 195 200 205

Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser 210 215 220

Gly Thr Ala Phe Thr Leu Arg IIe Ser Arg Val Glu Ala Glu Asp Val 225 230 235 240

Gly Val Tyr Tyr Cys Met Gln His IIe Glu Tyr Pro Phe Thr Phe Gly
245 250 255

Ser Gly Thr Lys Leu Glu IIe Lys Gly Gly Gly Gly Ser Gly Gly Gly 260 265 270

Gly Ser Gly Gly Gly Ser Gln Val Gln Leu Gln Gln Ser Gly Pro 275 280 285

Glu Leu Val Lys Pro Gly Ala Ser Val Lys IIe Ser Cys Lys Ala Ser 290 295 300

Gly Tyr Ala Phe Thr Asn Ser Trp Met Asn Trp Val Lys Gln Arg Pro 305 310 315 320

Gly Lys Gly Leu Glu Trp lle Gly Arg lle Tyr Pro Gly Asp Gly Glu 325 330 335

Thr lie Tyr Asn Gly Lys Phe Arg Val Lys Ala Thr Leu Thr Ala Asp 340 345 350

Lys Ser Ser Ser Thr Ala Tyr Met Asp IIe Ser Ser Leu Thr Ser Glu 355 360 365

Asp Ser Ala Val Tyr Phe Cys Ala Arg Gly Tyr Asp Asp Tyr Ser Phe 370 375 380

Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ala Gly Gly Gly 385 390 395 400

Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser Asp lle Val Met

405 410 415

Thr Gin Ala Ala Pro Ser lie Pro Val Thr Pro Gly Glu Ser Val Ser 420 425 430

lle Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser Asn Gly Asn Thr 435 440 445

Tyr Leu Tyr Trp Phe Leu Gin Arg Pro Gly Gin Ser Pro Gin Leu Leu 450 455 460

lie Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser 465 470 475 480

Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Arg IIe Ser Arg Val Glu 485 490 495

Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His lle Glu Tyr Pro
500 505 510

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu IIe Lys
515 520

<210> 265

<211> 30

<212> PRT

<213> Homo sapiens

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<400> 265
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Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr
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<211> 5

<212> PRT

<213> Homo sapiens

<400> 266

Asn Ser Trp Met Asn

•

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<210> 267

<211>: 14

<212> PRT

<213> Homo sapiens

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Trp Val Arg Gin Arg Pro Gly Lys Gly Leu Glu Trp Val Gly

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5

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<210> 268

<211> 17

<212> PRT

<213> Homo sapiens

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Arg lie Tyr Pro Gly Asp Gly Glu Thr lie Tyr Asn Gly Lys Phe Arg

1 5 10 15

Val

<210> 269

⟨211⟩ 32

<212> PRT

<213> Homo sapiens

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Arg Val Thr lie Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr Met Glu

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Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg 20 25 30

<210> 270

<211> 9

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<213> Homo sapiens

<400> 270

Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr

1 5

<210> 271

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<212> PRT

<213> Homo sapiens

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Trp Giy Gin Giy Thr Thr Val Thr Val Ser Ser

1

5

10

<210> 272

<211> 23

<212> PRT

<213> Homo sapiens

<400> 272

Asp lie Val Met Thr Gin Ser Ala Leu Ser Leu Pro Val Thr Pro Gly

1

_

10

15

Glu Pro Ala Ser Ile Ser Cys

20

<210> 273

<211> 16

<212> PRT

<213> Homo sapiens

<400> 273

Arg Ser Ser Lys Ser Leu Leu His Ser Asn Gly Asn Thr Tyr Leu Tyr

1

5

10

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<210> 274
<211> 15
<212> PRT
<213> Homo sapiens
<400> 274
Trp Tyr Leu Gin Lys Pro Gly Gin Ser Pro Gin Leu Leu ile Tyr
                                   10
<210> 275
<211> 7
<212> PRT
<213> Homo sapiens
<400> 275
Arg Met Ser Asn Leu Ala Ser
<210> 276
<211>
       32
<212> PRT
<213> Homo sapiens
<400> 276
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr
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Leu Lys ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys

1

10

20 25 30

<210> 277

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<213≻ Homo sapiens

<400> 277

Met Gln His lle Glu Tyr Pro Phe Thr

1 5

<210> 278

<211> 10

<212> PRT

<213> Homo sapiens

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Phe Gly Gln Gly Thr Lys Leu Glu ile Lys

5

<210> 279

<211>...30

<212> PRT

<213> Homo sapiens

<400> 279

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Gin Val Gin Leu Val Gin Ser Gly Pro Glu Val Lys Lys Pro Gly Ala

10

5

10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr
20 25 30

<210> 280

<211> 5

<212> PRT

<213> Homo sapiens

<400> 280

Asn Ser Trp Met Asn

<210> 281

<211> 14

<212> PRT

<213> Homo sapiens

<400> 281

Trp lie Arg Gin Arg Pro Gly Lys Gly Leu Glu Trp ile Gly

1

5

10

<210> 282

<211> 17

<212> PRT

<213> Homo sapiens

<400> 282

Arg lie Tyr Pro Gly Asp Gly Glu Thr lie Tyr Asn Gly Lys Phe Arg

Val

<210> 283

<211> 32

<212> PRT

<213> Homo sapiens

<400> 283

Arg Val Thr lie Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr Met Glu

1 5 10 15

Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg 20 25 30

<210> 284

<211> 9

<212> PRT

<213> Homo sapiens

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Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr

1 5

<210> 285

<211> 11

<212> PRT

<213> Homo sapiens

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1 5 10

<210> 286

<211> 1572

<212> DNA

<213> Homo sapiens

<400> 286

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gtgcagctgg	tgcagtctgg	acctgaggtg	aagaagcctg	gggcctcagt	gaaggtctcc	900
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gggaaattca	gggtcagagt	cacgattacc	gcggacgaat	ccacgagcac	agcctacatg	1080
caactgagca	gcctgagatc	tgaggacacg	gccgtgtatt	actgtgcgag	aggctatgat	1140
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ctcctgcata	gtaatggcaa	cacttacttg	tattggttcc	tgcagaagcc	agggcagtct	1380
ccacagotco	tgatctatcg	gatgtccaac	cttgcctcag	gggtccctga	caggttcagt	1440
ggcagtggat	caggcacaga	ttttacactg	aaaatcagca	gagtggaggc	tgaggatgtt	1500
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<210> 287

<211> 524

<212> PRT

<213> Homo sapiens

<400> 287

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
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Val Gin Ser Gin Val Gin Leu Val Gin Ser Gly Pro Giu Val Lys Lys
20 25 30

Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe 35 40 45

Thr Asn Ser Trp Met Asn Trp Val Arg Gln Arg Pro Gly Lys Gly Leu 50 55 60

Glu Trp lie Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr lie Tyr Asn 65 70 75 80

Giy Lys Phe Arg Val Arg Val Thr IIe Thr Ala Asp Glu Ser Thr Ser 85 90 95

Thr Ala Tyr Met Gin Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val 100 105 110

Tyr Tyr Cys Ala Arg Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly
115 120 125

Gin Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly

130 135 140

Gly Gly Ser Gly Gly Gly Ser Asp lie Val Met Thr Gln Ser Pro 145 150 155 160

Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg 165 170 175

Ser Ser Lys Ser Leu Leu His Ser Asn Gly Asn Thr Tyr Leu Tyr Trp

180 185 190

Phe Leu Gin Lys Pro Gly Gin Ser Pro Gin Leu Leu lie Tyr Arg Met 195 200 205

Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser 210 215 220

Gly Thr Asp Phe Thr Leu Lys IIe Ser Arg Val Glu Ala Glu Asp Val 225 230 235 240

Gly Val Tyr Tyr Cys Met Gln His IIe Glu Tyr Pro Phe Thr Phe Gly
245 250 255

Gin Gly Thr Lys Leu Glu lie Lys Gly Gly Gly Gly Ser Gly Gly Gly 260 265 270

Gly Ser Gly Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Pro

275 280 285

Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser 290 295 300

Gly Tyr Thr Phe Thr Asn Ser Trp Met Asn Trp Val Arg Gln Arg Pro 305 310 315 320

Gly Lys Gly Leu Glu Trp lle Gly Arg lle Tyr Pro Gly Asp Gly Glu 325 330 335

Thr lie Tyr Asn Gly Lys Phe Arg Val Arg Val Thr lie Thr Ala Asp 340 345 350

Glu Ser Thr Ser Thr Ala Tyr Met Gin Leu Ser Ser Leu Arg Ser Glu 355 360 365

Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Tyr Asp Asp Tyr Ser Phe 370 375 380

Ala Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly 385 390 395 400

Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Asp lle Val Met
405 410 415

Thr Gin Ser Pro Leu Ser Leu Pro Val Thr Pro Gly Giu Pro Ala Ser

420 425 430

lle Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser Asn Gly Asn Thr 435 440 445

Tyr Leu Tyr Trp Phe Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu 450 455 460

Ile Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser465470475480

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys IIe Ser Arg Val Glu 485 490 495

Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His lle Glu Tyr Pro
500 505 510

Phe Thr Phe Gly Gln Gly Thr Lys Leu Glu IIe Lys 515 520

<210> 288

<211> 354

<212> DNA

<213> Homo sapiens

<400> 288

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60

120

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cctggaaagg	gtcttgagtg	gattggacgg	atttatcctg	gagatggaga	aactatctac	180
aatgggaaat	tcagggtcag	agtcacgatt	accgcggacg	aatccacgag	cacagoctac	240
atgcaactga	gcagcctgag	atctgaggac	acggccgtgt	attactgtgc	gagaggctat	300
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<210> 289

<211> 1.18

<212> PRT

<213> Homo sapiens

<400> 289

Gin Val Gin Leu Val Gin Ser Gly Pro Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Ser 20 25 30

Trp Met Asn Trp Val Arg Gln Arg Pro Gly Lys Gly Leu Glu Trp lle 35 40 45

Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr lie Tyr Asn Gly Lys Phe 50 55 60

Arg Val Arg Val Thr lie Thr Ala Asp Giu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Gin Leu Ser Ser Leu Arg Ser Giu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr 100 105 110

Thr Val Thr Val Ser Ser 115

<210> 290

<211> 336

<212> DNA

<213> Homo sapiens

<400> 290

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ttcctgcaga agccagggca gtctccacag ctcctgatct atcggatgtc caaccttgcc 180
tcaggggtcc ctgacaggtt cagtggcagt ggatcaggca cagattttac actgaaaatc 240
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<210> 291

⟨211⟩ 112

<212> PRT

<213> Homo sapiens

<400> 291

Asp lie Val Met Thr Gin Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
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Glu Pro Ala Ser IIe Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Leu Gln Lys Pro Gly Gln Ser 35 40 45

Pro Gin Leu Leu IIe Tyr Arg Met Ser Asn Leu Ala Ser Giy Val Pro 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys IIe 65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 85 90 95

lie Giu Tyr Pro Phe Thr Phe Gly Gin Gly Thr Lys Leu Giu lie Lys
100 105 110

<210> 292

(211) 1572

<212> DNA

<213> Homo sapiens

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ggatccggag	gtggtggatc	gggtggtgga	ggatcggata	ttgtgatgac	tcagtctcca	1260
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<210> 293

<211> 524

<212> PRT

<213> Homo sapiens

<400> 293

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Val Gin Ser Gin Val Gin Leu Val Gin Ser Gly Pro Glu Val Lys Lys
20 25 30

Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe

35 40 45

Thr. Asn Ser Trp Met Asn Trp Val Arg Gln Arg Pro Gly Lys Gly Leu 50 55 60

Glu Trp lle Gly Arg lle Tyr Pro Gly Asp Gly Glu Thr lle Tyr Asn 65 70 75 80

Gly Lys Phe Arg Val Arg Val Thr lie Thr Ala Asp Glu Ser Thr Ser 85 90 95

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val 100 105 110

Tyr Tyr Cys Ala Arg Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly
115 120 125

Gin Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 130 135 140

Gly Gly Ser Gly Gly Gly Ser Asp lie Val Met Thr Gln Ser Pro 145 150 155 160

Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg 165 170 175

Ser Ser Lys Ser Leu Leu His Ser Asn Gly Asn Thr Tyr Leu Tyr Trp

180 185 190

Phe Gin Gin Lys Pro Giy Gin Ala Pro Arg Leu Leu lle Tyr Arg Met 195 200 205

Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser 210 215 220

Gly Thr Ala Phe Thr Leu Lys IIe Ser Arg Val Glu Ala Glu Asp Val 225 230 235 240

Gly Val Tyr Tyr Cys Met Gln His lle Glu Tyr Pro Phe Thr Phe Gly
245 250 255

Gin Gly Thr Lys Leu Glu lie Lys Gly Gly Gly Gly Ser Gly Gly Gly 260 265 270

Gly Ser Gly Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Pro 275 280 285

Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser 290 295 300

Gly Tyr Thr Phe Thr Asn Ser Trp Met Asn Trp Val Arg Gln Arg Pro 305 310 315 320

Gly Lys Gly Leu Glu Trp lie Gly Arg lie Tyr Pro Gly Asp Gly Glu

325 330 335

Thr lie Tyr Asn Gly Lys Phe Arg Val Arg Val Thr lie Thr Ala Asp 340 345 350

Glu Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu 355 360 365

Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Tyr Asp Asp Tyr Ser Phe 370 375 380

Ala Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly 385 390 395 400

Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Asp lle Val Met 405 410 415

Thr Gin Ser Pro Leu Ser Leu Pro Vai Thr Pro Gly Glu Pro Ala Ser 420 425 430

lle Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser Asn Gly Asn Thr 435 440 445

Tyr Leu Tyr Trp Phe Gin Gin Lys Pro Gly Gin Ala Pro Arg Leu Leu 450 455 460

lle Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser

470 475 480 465 Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Lys 11e Ser Arg Val Glu 490 485 Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His Ile Glu Tyr Pro 510 500 505 Phe Thr Phe Gly Gln Gly Thr Lys Leu Glu lie Lys 520 515 <210> 294 <211> 354 <212> DNA <213> Homo sapiens <400> 294 caggtgcagc tggtgcagtc tggacctgag gtgaagaagc ctggggcctc agtgaaggtc 60 tcctgcaagg cttctggata caccttcacc aactcctgga tgaactgggt gaggcagagg 120

cctggaaagg gtcttgagtg gattggacgg atttatcctg gagatggaga aactatctac

aatgggaaat tcagggtcag agtcacgatt accgcggacg aatccacgag cacagcctac

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagaggctat

gatgattact cgtttgctta ctgggggccag ggaaccacgg tcaccgtctc ttca

180

240

300

<211> 118

<212> PRT

<213> Homo sapiens

<400> 295

Gin Val Gin Leu Val Gin Ser Giy Pro Giu Val Lys Lys Pro Giy Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Ser 20 25 30

Trp Met Asn Trp Val Arg Gin Arg Pro Gly Lys Gly Leu Glu Trp lie 35 40 45

Gly Arg lie Tyr Pro Gly Asp Gly Glu Thr lie Tyr Asn Gly Lys Phe
50 55 60

Arg Val Arg Val Thr lie Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met-Glu Leu Ser-Ser Leu Arg-Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Tyr Asp Asp Tyr Ser Phe Ala Tyr Trp Gly Gln Gly Thr 100 105 110

Thr Val Thr Val Ser Ser

<210>	296					
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<400>	296	·				
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atctcc	tgca ggtctagt	taa gagtctcctg	catagtaatg	gcaacactta	cttgtattgg	120
		•				180
ttccag	caga agccaggg	gca ggctccacgg	ctcctgatct	atcggatgtc	Caaccitgcc	100
4		gtt cagtggcagt	ggatoagga	cagettttae	actgaaaatc	240
tcaggg	gicc cigacage	git Cagiggoagi	ggalcaggoa	Oago C C C Cao	ao egada co	
200202	otoo apecteas	gga tgttggggtt	tattacteca	tgcaacatat	agaatatcct	300
пропри	5 - 55	3660000			,	
tttacg	ttcg gccaagg	gac caaactggaa	atcaaa	•		336
⟨210⟩	297 .					
⟨211⟩	112					•
<212>	PRT					•
<213>	Homo sapiens	s				
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Glu Pro Ala Ser IIe Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser 20 25 30

Asp lie Vai Met Thr Gin Ser Pro Leu Ser Leu Pro Vai Thr Pro Gly

Asn Gly Asn Thr Tyr Leu Tyr Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu lle Tyr Arg Met Ser Asn Leu Ala Ser Gly Val Pro 55 60 Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr Leu Lys Ile 70 75 65 Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln His 95 90 85 lle Glu Tyr Pro Phe Thr Phe Gly Gln Gly Thr Lys Leu Glu lle Lys 110 100 105 <210> 298 <211> 30 <212> . PRT <213> Homo sapiens **<400> 298**

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr 20 25 30

5

Gin Val Gin Leu Val Gin Ser Gly Pro Glu Val Lys Lys Pro Gly Ala

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<211> 14
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<400> 299
Trp Val Arg Gin Arg Pro Gly Lys Gly Leu Glu Trp lie Gly
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1 ...
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<211> 32
<212> PRT
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Arg Val Thr lle Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr Met Gln
                5
                                   10
Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
                               25
                                                   30
            20
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<212> PRT
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Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser

<210> 302

<211> 23

<212> PRT

<213> Homo sapiens

<400> 302

Asp lie Val Met Thr Gin Ser Pro Leu Ser Leu Pro Val Thr Pro Gly

1 5 10 15

Glu Pro Ala Ser Ile Ser Cys

20

<210> 303

<211> 15

<212> PRT

<213> Homo sapiens

<400> 303

Trp Phe Leu Gin Lys Pro Giy Gin Ser Pro Gin Leu Leu ile Tyr 1 5 10 15

<210> 304

<21.1> 32

<212> PRT

<213> Homo sapiens

<400> 304

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr

1 5 10 15

Leu Lys IIe Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys
20 25 30

<210> 305

<211> 10

<212> PRT

<213> Homo sapiens

<400> 305

Phe Gly Gln Gly Thr Lys Leu Glu IIe Lys

1 5 10

<210> 306

<211> 32

<212> PRT

<213> Homo sapiens

<400> 306

Arg Val Thr lie Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr Met Glu

1 5 10 15

Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg 20 25 30

<210> 307

<211> 15

<212> PRT

<213> Homo sapiens

<400> 307

Trp Phe Gin Gin Lys Pro Gly Gin Ala Pro Arg Leu Leu lie Tyr
1 5 10 15

<210> 308

<211> 32

<212> PRT

<213> Homo sapiens

<400> 308

Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ala Phe Thr
1 5 10 15

Leu Lys IIe Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys
20 25 30